

— THE —
MODERN
CREATION
TRILOGY
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Henry M. Morris
John D. Morris

The Modern Creation Trilogy

Volume I

**Scripture
and
Creation**

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Dr. Henry M. Morris

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Table of Contents

Introduction	9
1. The Biblical Record of Creation	13
Divisions of Genesis	14
Characteristics of the Creation	18
2. The Fall, the Curse, and the Flood	23
God's Principle of Conservation	23
The Fall and the Curse	26
The Genesis Flood	28
Origin of the Nations	29
Summary of the Biblical Model of Creation	32
3. Attempts to Compromise on Creation	35
Theistic Evolution	36
Theological Contradictions Apart from Scripture	39
Progressive Creation	41
The Day-Age Theory	42
The Gap Theory	50
The Framework Hypothesis	61
4. Explaining Away the Flood	65
The Local Flood Theory	65
The Tranquil Flood Theory	68
Gaps in Human Chronology	69
5. The Age of the Earth	73
Why Recent Creation Is a Vital Doctrine	74
The Testimony of Christ and the Apostles	79
6. Supposed Biblical Difficulties with Recent Creationism	83
The Calculations of Bishop Ussher	83
Adam and the Animals	85
Creation and Ecology	88
The Length of the Seventh Day	91
7. The Dangerous Route of Compromise	95
The Intransigence of Evolutionists	96
No Need for God	100
Compromising God's Character	103
The Sad Results of Compromise	108
8. The Importance of Creation	113
Creation, the Foundation	114

	The Dominion Mandate	117
	Creation in All the Bible	121
	Praise to God for His Creation	122
9.	Jesus Christ — Creator and Redeemer	125
	King of Creation	126
	Pre-Incarnate Appearances of God to Man	129
	The Incarnation	133
	Creation and the Cross	137
	Jesus the Creationist	139
	A Tale of Two Weeks	141
	Creation and Resurrection	147
10.	Creation and the Eternal Kingdom	153
	The Bondage of Decay	153
	The Eternal Earth	156
	The Destroyed Earth	157
	The Earth Renewed	158
	Christ's Final Coming	160
	The Creationist Testimony in Heaven	161
11.	Creation Evangelism	163
	The Liberating Gospel of Creation	164
	Creation and the Apostolic Witness	165
	The Urgency of Real Gospel Preaching	167
	The Proven Effectiveness of Creation Evangelism	169
	The ICR Survey	171
	The Battle for Creation	177
	The Law, the Schools, and the Christian	179
	Outcome of the Battle	183
12.	Bypaths in Creationland	185
	The Faith of Noah	185
	The Host of Heaven	187
	The Heat of the Sun	191
	The Word in the World	191
	Dragons in Paradise	207
	The Resting Ark, the Grounded Fish, and the Empty Tomb	212
	Index of Subjects	217
	Index of Names	220
	Index of Scriptures	221

Introduction

There are only two basic concepts of the origin of the universe and its basic components and systems. Either they have all come about by strictly naturalistic processes that are (at least in principle) observable and repeatable, or they have not — one or the other.

Without argument, at least some *have* originated by strictly natural process, and have been observed to do so. But if they have not *all* originated by natural processes, then at least *some* have originated by supernatural processes that are no longer observable and are not repeatable. This is the basic difference between the evolutionary model of origins and the creationist model of origins. If the evolutionary model is correct, then no Creator is needed. Even human beings are merely the result of natural processes that somehow generated the elementary particles of matter and then organized them into stars, planets, animals, and people — “from particles to people” or “hydrogen to humans.”

If creation is true, on the other hand, then there *is* a Creator, and all reality must be related to that Creator and His purpose in creation. Men and women are not the products of capricious natural forces, but rather of purposeful action with specific goals, both for the universe as a whole and for each person individually. Since the choice between evolution and creation ultimately affects every area of human life, it is extremely important that we make the *right* choice!

But how can we decide? That’s the question. If we merely go along with the majority view in the intellectual world, we all would be evolutionists, for evolutionary thinking clearly dominates the schools, the media, and most other spheres of influence.

The majority, however, is not always right. There exists at least a significant creationist minority in this so-called intellectual realm, many of whom were once evolutionists and later became converted to creationism for what seemed to them convincing reasons. In any case, it should be obvious that it is impossible to *prove* which model is correct, for the simple reason that we cannot repeat history and *see* what happened.

Therefore, we must depend upon indirect, circumstantial evidence, and then make our decision. Ultimately, we will decide which model to *believe*, and then act in faith upon that belief. We will have *faith* in evolution, or *faith* in creation, then live our lives accordingly, whether that has been a conscious decision or not.

In view of the profound — even eternal — consequences involved, everyone ought to examine both models and then determine which to believe. He or she should examine carefully the evidences pro and con in each case, and continually test these evidences, evaluating their validity and meaning.

It would seem that there are essentially just three lines of evidence that need to be considered. First, there are the factual data, the solid evidence supplied by the observed facts of science and the observed and reliably recorded facts of human history. We can call this the evidence from science. This line of evidence is treated in Volume 2 of this Trilogy, with the conclusion that the evidence strongly *favours* the creation model, even though it can never *prove* it.

But there is an important second line of evidence to consider. The Lord Jesus Christ put it this way: “A good tree cannot bring forth evil fruit, neither can a corrupt tree bring forth good fruit. . . . Wherefore by their fruits ye shall know them” (Matt. 7:18–20). Does the evolutionary faith generate good or evil results in human society, when it is followed logically and put into practice? What about faith in creation and a Creator — what fruits does it produce?

This line of evidence is examined in Volume 3 of the Trilogy, with the conclusion again in favor of creation. That is, evolutionism generates bad fruits; creationism generates good fruits. Thus, the creation model, on the basis of this test, is more likely to be true than the evolution model. Again, however, this does not *prove* creation, for we do not really *know* what happened in the prehistoric past. We were not there, nor can we travel back in time in some sort of time machine to *see* what happened. All we can really *know* is that the inhabitants of the earth seem designed to live and prosper under the guidelines spelled out by their designer, and seem to destroy both themselves and others when operating from an evolutionary basis.

However, there is still a third type of evidence that must be considered, for one of the two models involves a Creator, and that Creator *did* observe what happened. He actually caused it to happen! Evolutionists may deny the validity of this evidence, for they tend to reject the very idea of God out of hand, not believing He even exists.

This, however, begs the question, for it is absolutely impossible to *prove* the non-existence of God the Creator. Even such a knowledgeable atheist as the scientist Isaac Asimov was honest enough to acknowledge this. In his later years, after authoring more books on more fields of science (reputedly finishing with over 500 books to his credit) than probably any other scientist who ever lived, he admitted:

Emotionally, I am an atheist, I don't have the evidence to prove that God doesn't exist, but I so strongly suspect He doesn't that I don't want to waste my time.¹

If anyone ever knew the whole field of science and its implications, that person was Dr. Asimov, yet *he* could not prove there is no God. Neither can anyone else. They may *choose* not to believe in God, for belief in Him may be uncomfortable to them, but wishing for His non-existence doesn't make it so. Therefore, to be perfectly honest, everyone should at least admit the possibility that there is a Creator, and that He may (in fact, almost certainly *would*) reveal the essential facts concerning the origin, meaning, and purpose of His creation to those of His creatures able to receive and understand such revelation.

Assuming that such a revelation has been given, it follows that it must now be in the book we call the Bible, for this is the only book coming down from antiquity that even *attempts* to give the origin of the entire universe of space, time, and matter, as well as the origin of life and man. All other so-called sacred "scriptures" — the writings of Buddha and Confucius, the Hindu Vedas, all the cosmogonic myths of Greece and Rome, of Egypt and Babylon, and all the rest — all *begin* with the space/time/matter universe already in existence, and then attempt to speculate how it evolved into its present form.

Only the creation record in Genesis — which is accepted by orthodox Jews, Muslims, and Christians — deals with the origin of the universe itself. Therefore, if God *does* exist, and if He *has* revealed the essentials concerning His creation of all things to man, that revelation must be found in the Bible, especially in the creation account in the Book of Genesis.

If these things are so — and there is at least a strong possibility that they are — then the *biblical* evidence concerning origins is the most important of all, more important than the evidence from either the data of science or the effects in society. This is because the biblical record —

1 Isaac Asimov, Interview by Paul Kurtz, "An Interview with Isaac Asimov on Science and the Bible," *Free Inquiry*, vol. 2, (Spring 1982), p. 9.

if it is what it claims to be and what it has been accepted to be by millions of people, people from every time and place and culture — is the inspired, infallible, and authoritative record of the Creator himself. He was there and knows how it was and what His purposes are.

Therefore, Volume 1 of this Trilogy on creation will examine first of all what the Bible reveals about origins. It will become compellingly clear that — not only in Genesis but all through the Holy Scriptures — this world and everything in it had its origin not by evolutionary processes but by supernatural special creation, coming into existence at the word of the eternal, transcendent, omnipotent, personal Creator God — the sovereign God of the Bible.

This evidence should be sufficient, but it will then also be supplemented by strong scientific evidence (see Volume 2) and persuasive societal evidence (Volume 3). The conclusion will be that we are certainly the products of God's special, purposeful creation, and, therefore, must someday answer to Him.

In this volume, therefore, we shall examine *only* the biblical evidence, accepting it at face value, interpreting each relevant passage of the Bible literally in its intended context, and deliberately avoiding any attempt to correlate it with science. This approach will yield what we can call the biblical doctrine of creation and earth history.

Then, in Volume 2, we shall examine only the data from science and history, completely avoiding biblical references, endeavoring to develop a strictly fact-based scientific doctrine of origins and history. The evolutionary model will be included in this analysis, of course, but the facts must be allowed to speak for themselves, not merely interpreted to fit evolutionism. As indicated above, when this is done, the scientific data will also be seen to correlate better with creation than with evolution.

Thus, the remarkable fact will emerge that the scientific model of origins — developed without reference to the Bible — will ultimately be found to agree fully with the biblical record of origins when the latter is developed without reference to science. This has to be so, of course, because the God who made the world also wrote the Word!

It will come as no surprise, then, as shown in Volume 3, that the evolutionary world view has had and is having a pervasively harmful effect on society and human life in general, whereas true biblical creationism is altogether beneficial and uplifting in every area of life.

First of all, though, let us proceed to explore the Word of God and its marvelous divine record of creation and history.

Chapter 1

The Biblical Record of Creation

In Volume 2 of this Trilogy, *Science and Creation*, it is shown that the basic facts of science fit the creation model of origins and earth history much better than they do the evolution model. There are, to be sure, certain unresolved problems in correlating all the scientific data with the concept of recent special creation, but these problems are not nearly so intractable as those which evolutionism encounters.

However, the details of the creation period — such aspects as its duration, the order of events, the methods used, and especially its meaning and purpose — cannot be determined from science. The scientific method is limited to the study of processes as they occur at present, not as they *might* have occurred in the past. Science in its strict sense can deal with the “how” and “what” and “where” questions, but only rarely with “when,” and never with “why.”

If creation is really a fact, this means there is a Creator, and the universe is His creation. He had a purpose in creation, and man¹ is apparently at the center of that purpose, since only man is able to understand even the concept of creation. It is reasonable, therefore, that God, the Creator, would somehow reveal to His creature, man, the necessary information concerning the creation which could never be discovered by himself.

This is exactly what He *has* done in His book of “beginnings,” the Book of Genesis. Rather than outmoded folklore, as most critics allege, the creation chapters of Genesis are marvelous and accurate accounts of the

¹ “Man” is used here and frequently in this book, as in the Bible, in the generic sense, as synonymous with “human beings.”

actual events of the primeval history of the universe. They give data and information far beyond those that science can determine, and at the same time provide an intellectually satisfying framework within which to interpret the facts that science *can* determine.

The old arguments against the historicity of Genesis no longer carry weight. It once was maintained that neither Moses nor any of his predecessors could have written Genesis, since they could not have known even how to write. No one dare suggest such a notion any more. Writing was practiced even by the common people long before Moses, and even before the time of Abraham. Early man was a highly skilled technologist in many fields at a time far earlier than imagined by evolutionists. There is no reason at all, other than evolutionary preconceptions, that it should not be believed that man has been able to read and write since he was first created.

The general setting of Genesis, from chapter 12 onward (culture, customs, etymology, geography, political units, etc.), is very realistic — so much so that its narratives must have come originally from contemporaries of the people described. There seems no good reason, except for evolutionary preconceptions, to reject the probable historicity of the preceding 11 chapters of Genesis, which merge easily and naturally into Genesis 12.

Finally, all the writers of the New Testament, and Jesus Christ himself, accepted the historical accuracy and divine inspiration of all the early chapters of Genesis, as will be shown in this chapter. To believe these records as being altogether true and reliable is the only position consistent with accepting the Lord Jesus Christ as true and His teachings as authoritative.

Divisions of Genesis

There are several helpful ways of subdividing the Genesis record for effective understanding. The most obvious division is that of the six days of creation. Another important distinction has to do with God's works of creation and His works of formation. Still another involves the structural divisions of the entire Book of Genesis itself. These divisions are indicated wherever the phrase "These are the generations of . . ." occurs. Each such occurrence marks the termination of one narrative and the beginning of another. This fact strongly implies that each of these divisions had a different original author.

1. The Original Writers of Genesis

As we have seen, the liberal myth that Moses could not have written Genesis because men did not know how to write then was dispelled a long

time ago. Nevertheless, certain differences in style and vocabulary still seem to many to justify some kind of “documentary” theory of Genesis, pointing to more than one author of the original documents.

It is significant that, although the Book of Genesis is frequently quoted in the New Testament, nowhere are any of these quotations attributed to Moses. Quotations from the other four books of the Pentateuch, however, frequently *are* ascribed to him. There is no doubt, on the other hand, that the Jews regarded all five books as the books of Moses. This paradox is easily resolved when it is realized that Moses may have been the compiler and editor, rather than the author, of Genesis. The original writers of the various divisions were the patriarchs themselves, the ones whose names appear in the formula “These are the generations of. . . .”

In accord with the common practice of ancient times, records and narratives were written down on tables of stone and then handed down from family to family, perhaps, finally to be placed in a library or public storehouse of some sort. It seems most reasonable to believe that the original records of Genesis were written down by eyewitnesses and handed down through the line of patriarchs, from Adam through Noah and Abraham and finally to Moses.

All of these ancient records were then compiled and edited by Moses, with the necessary transitional and explanatory comments, into their final form. He later followed this with his own accounts, which we now have in the Books of Exodus, Leviticus, Numbers, and Deuteronomy. Realization of this fact makes these primeval histories *live* in an exciting way. They are not simply old traditions, handed down by word-of-mouth transmission for many generations, but are actual *firsthand accounts written by eyewitnesses* — men who knew and observed and reported things as they really happened.

The word “generations” in Hebrew became “Genesis” when translated into the Greek language for the Septuagint version. Genesis was adopted for the title of the entire book, a book of the collected “generations” of the ancient patriarchs. The word “genesis” conveys the idea both of origin and chronological records.

It was common in antiquity, when a chronicler completed a tablet, to affix his signature at its end. “These are,” he would write, “the historical records of Nahor” (or whatever his name was). Then, if some other writer later were to continue the same chronicle on another tablet, he would key it in to the previous one by some identifying word or

phrase which corresponded to the closing portion of the preceding tablet.²

Although there is some uncertainty about whether the “generations” formula applies to the verses preceding it or following it, the weight of evidence seems to favor the former. In every case, the events described in each section could have been known by the man whose name followed it, but not by the man whose name preceded it. For example, the so-called “second creation account,” from Genesis 2:3 to 5:1 is identified as “the book of the generations of Adam,” but Adam could not have known all the events described from 5:1 through 6:8. The latter was identified as “the generations of Noah” in Genesis 6:9.

Following this line of reasoning, there really are two creation accounts, the second written by Adam, from his viewpoint. The first (Gen. 1:1–2:3) could not have been observed by any man at all, and must have been written directly by God himself, either with His own “finger,” as He also did the Ten Commandments (Exod. 31:18), or else by direct supernatural revelation. This is the only one of the “generations” not identified with the name of a particular man, but instead, “These are the generations of the heaven and of the earth when they were created” (Gen. 2:4). In a very direct and unique way, this constitutes the Creator’s personal narrative of heaven and earth. It would be well not to try to explain away its historicity by calling it merely a literary device of some kind. Rather, men should bow before its author in believing obedience, acknowledging that He has clearly spoken, in words that are easy to be understood, concerning those things which they could never discover for themselves.

2. God’s Works of “Creating” and “Making”

The first creation account is concluded with the statement “He had rested from all his work which God created and made” (Gen. 2:3). There are evidently two types of “work” accomplished by God in the creation week and reported in His record. In some cases, His work was to create (Hebrew *bara*); in others, it was to *make* (Hebrew *asah*) or *form* (Hebrew *yatsar*). This statement provides another important direction for classifying God’s works as recorded in this chapter.

God’s work of creation, in other words, was that of calling into existence out of nothing (except God’s own power, of course) that which

2 P. J. Wiseman, *New Discoveries in Babylonia about Genesis* (London: Marshall, Morgan & Scott, 1946). The “patriarchal documentary” theory of the writing of Genesis is developed fully and convincingly in this book. Also see the commentary on Genesis by Henry M. Morris, *The Genesis Record* (Grand Rapids, MI: Baker Book House, 1976), p. 22–30.

had no existence in any form before. Only God can create in this sense, and in all the Bible no other subject appears for the verb “create” than God. It is possible for man with his God-created intelligence and abilities to “make” things, assembling complex systems out of simpler components, but he cannot “create” anything.³ God also can “make” things, and can do so far more effectively than man. He was, in fact, doing just this during the creation week, along with His work of creating, and both types of works — creating and making — were terminated at the end of that week. “The works were finished from the foundation of the world” (Heb. 4:3).

It is significant that only three works of real creation (that is, as specified by the verb *bara*) are recorded in Genesis 1. These are (1) the creation of the basic elements of the universe (space, matter, and time — or “heavens,” “earth,” and “beginning”) as recorded in Genesis 1:1; (2) the creation of consciousness (Hebrew *nephesh*, the “soul”), which is also associated with the “breath of life” (Hebrew *ruach*, the “spirit” or “mind” or “breath”) — recorded in Genesis 1:21, where “creature” is *nephesh*, which in the Hebrew is usually translated as “soul” or “life”; and (3) the creation of the “image of God” in man, as recorded in Genesis 1:27.

Thus, there are three basic created entities: the physical elements of the cosmos, of which all inorganic and unconscious organic systems⁴ (e.g., plants) are “made”; the animal world, whose physical systems consist of the same physical elements, but which also has the created capacity of consciousness; and the human realm, which shares the physical matter of the cosmos and the consciousness of the animal world, but which also has the uniquely created capacity for God-likeness — the “image of God.”

3. The Work of the Six Days

Between these great acts of *creation* were placed innumerable acts of *formation*, climaxed finally by the formation of man’s body out of the physical elements, the “dust of the ground,” and his soul and breath from God’s own Spirit (Gen. 2:7). These acts of formation were spaced

3 Sometimes a literary work, an artistic design, or even a new dress, is called a “creation,” but this is not really correct. A new combination of matter or ideas is a formation, or manufacture, not a true creation.

4 The exact boundary line between unconscious replicating chemical systems and creatures that have life in the biblical sense (that is, creatures possessing *nephesh*) is not yet clear from either science or Scripture. It may be possible that some of the simpler invertebrate animals are in the former category. In the case of plants, at least, the fact that they were designed by God to be used as food by men and animals means that they did not really possess life and, therefore, they could not “die.” Death came into the world only as a result of man’s sin (Rom. 5:12).

out in an effective and logical manner during the six days of creation, as follows:

<i>Day</i>	<i>Formation</i>
One	Energizing of the physical elements of the cosmos.
Two	Formation of the atmosphere and hydrosphere on earth.
Three	Formation of the lithosphere and biosphere on earth.
Four	Formation of the astrosphere and its heavenly bodies.
Five	Formation of life in the atmosphere and hydrosphere.
Six	Formation of life for the lithosphere and biosphere.
Seven	Rest from the completed work of creating and making all things.

The logic and symmetry of the formative works of the six days are evident from the above outline. It is not the purpose here to give a full biblical exposition of these verses,⁵ but only to point out certain basic principles involved in their application.

Characteristics of the Creation

It is not feasible to discuss in detail here all aspects of the creation record in Genesis. Certain important points need to be recognized and emphasized, however, right from the beginning.

1. God's Purposive Progress in Creation

Note, for example, that each stage of the creation was an appropriate preparation for the succeeding stage, and all of them for the ultimate purpose of providing a suitable home for man. Note also that each created entity had a specific purpose — none was the mere outworking of natural random forces. This implies that God directly fitted each for its own purpose: no “trial and error” system of evolutionary meandering was involved.

⁵ From our present viewpoint, there is little difference between entities that were “created” by God and those that were “made” by Him. For practical purposes, it seems likely that He made things (e.g., land, water, stars, animal bodies) essentially instantaneously, so that in effect they were specially created. Nevertheless, only one specific act of physical creation is recorded as such, since at that time (Gen. 1:1) God created the basic space/mass/time continuum out of whose elemental structure all other *physical* systems must be formed. Similarly, only one act of *biological* Creation is recorded (Gen. 1:21), though the *nephesh* principle then created would likewise be implanted thereafter in every subsequent animal (or man) either formed directly by God or indirectly through reproduction.

The theological objections to the notion of theistic evolution will be listed shortly, along with similar objections to its semantic substitute, progressive creation. Each system and each organism were created specifically the way God designed them to be, and He intended and constructed each to retain its own character. Similarly, the creation week was continuous, with no “gaps” and was a true week; in fact, it was the very prototype of all subsequent weeks — consisting of seven literal days, no more and no less. The “gap theory” and “day-age” theory will be considered in detail shortly, and it will become evident that neither one is based on legitimate biblical exegesis, nor is either harmonious with science.

2. Appearance of History

Another point important to recognize is that the creation was “mature” from its birth. It did not have to grow or develop from simple beginnings. God formed it full-grown in every respect, including even Adam and Eve as mature persons when they were first formed. The whole universe had an “appearance of history” right from the start. It could not have been otherwise for true creation to have taken place. “Thus the heavens and the earth were finished, and all the host of them” (Gen. 2:1).

We do not have all of the details, but this surely means that the light from the sun, moon, and stars was shining upon the earth no later than the end of day four, since their very purpose was “to give light upon the earth” (Gen. 1:17). As a matter of fact, it is possible that these light-waves traversing space from the heavenly bodies to the earth were energized even before the heavenly bodies themselves in order to provide the light for the first three days.⁶ It was certainly no more difficult for God to form the light-waves than the “light-bearers” that would be established to serve as future generators of those waves.

Note that this concept does not in any way suggest that fossils were created in the rocks, nor were any other evidences of death or decay so

6 The light for the first three days obviously did not come from the sun, moon, and stars, since God did not make them and place them in the heavens until the fourth day (Gen. 1:16–19). Nevertheless, the light source for the first three days had the same function (“to divide the light from the darkness”) as did the heavenly bodies from the fourth day onward (Gen. 1:4, 18). This “division” now results from the sun and moon and the earth’s axial rotation. For practical purposes, therefore, the primeval light must essentially have come from the same directions as it would later when the permanent light-sources were set in place.

7 This does not involve “deception” by God, since He has clearly revealed what He did in His Word. True creation, by definition, means that any object so created must look at least superficially like it was already there and thus would appear to have had some kind of history.

created. That would have involved the creation, not of an appearance of history, but of an appearance of evil, and would be contrary to God's nature.⁷

3. The "Very Good" Creation

After each of His activities during creation week, God pronounced His work to be "good" (verses 4, 10, 18, 21, 25). It was perfect, exactly as He desired, fully planned and prepared for His "image" to be reproduced in man. Finally, He pronounced it all "very good" (verse 31).

What state of affairs could the God described in Scripture declare to be "good," and what could He label "very good"?

God is *living*, and a giver of life, not a cause of death. Therefore, there must have been no death of "living" things when He declared His completed creation to be very good! Thus, He ordained that all of conscious animal life were to be plant eaters (verse 30), as also were Adam and Eve (verse 29). There could have been no carnivorous activity, no bloodshed, no death. He certainly would not have employed such a sadistic process as survival of the fittest, struggle for existence, and natural selection to create and maintain His "very good" masterpiece.

Even the presence of previous life in the form of fossils could not have been "good" in His eyes, for many of the fossils give evidence of having died a horrible death. Thus, the fossil record must have been emplaced at some time after creation.

4. The World That Then Was

It must also be recognized that this primordial-created world was different from the present world in many significant ways. There were, in that world, "waters which were above the firmament" (Gen. 1:7), and this corresponds to nothing in the present world. The word "firmament" (Hebrew *raqia*, meaning "stretched-out thinness") is essentially synonymous with "heaven" (note Gen. 1:8), and thus means simply "space," referring either to space in general or to a specific space, as the context requires. In this case, the firmament was essentially the atmosphere, where birds fly (Gen. 1:20). The waters above seem to have been in the form of a vast blanket of invisible water vapor, translucent to the light from the stars but productive of a marvelous greenhouse effect which maintained mild temperatures from pole to pole, thus preventing air-mass circulations and the resultant rainfall (Gen. 2:5). Such a layer would have had the further effect of efficiently filtering harmful radiations from space, markedly reducing the rate of somatic mutations in living cells, and, as a consequence, drastically decreasing the rate of aging and death.

Another great difference was in the antediluvian geography. The Edenic river system (Gen. 2:10–14) obviously does not exist in the present earth. The artesian nature of the source of the four rivers, plus the later references to the breaking-up of the fountains of the great deep (Gen. 7:11) indicate that there were great reservoirs of water under pressure below the earth's crust. These waters, and the waters above the firmament, must now be in the present oceanic systems, and this, in turn, implies that the antediluvian oceans were much less extensive than now. Therefore, the lands were more extensive, and the mild climates and fertile soils would have supported far greater numbers of plants and animals all over the world than is now the case.

In addition to all this, there was in the beginning no death! Death came into the world only when sin came into the world (Rom. 5:12; 8:22). Man would have lived forever had he not sinned, and so, apparently, would have the animals (at least all those possessing the *nephesh*, the "soul"). Plant life, of course, is not conscious life, but only very complex replicating chemicals. The eating of fruits and herbs was not to be considered "death" of the plant materials since they had no created "life" (in the sense of consciousness) anyhow.

All this has changed now. Decay and death came with the curse, and the antediluvian environment changed to the present environmental economy at the time of the great flood sent by God in the days of Noah. With that event, "The world that then was, being overflowed with water, perished" (2 Pet. 3:6).

Chapter 2

The Fall, the Curse, and the Flood

Four great events changed the primeval world from the “very good” world, as it was described by God himself at the end of the six days of creation (note Gen. 1:31–2:4) to “this present evil world,” as the apostle Paul called it (Gal. 1:4) in the first century of the present era. These were, in order: (1) the sin and fall of the first man and woman; (2) the curse pronounced by God on the whole creation as a result of that sin; (3) the Flood that physically destroyed the antediluvian world in the days of Noah; and (4) the confusion of tongues and dispersion of the nations at Babel.

These world-changing events are described in Genesis 3–11, but are, in general, completely ignored in the evolutionary world view. Nevertheless, they are vitally important to a true understanding of the present world, with all its terrible problems. They necessarily constitute important components of the creationist world view, so the biblical accounts thereof are summarized in this chapter.

God’s Principle of Conservation

The world that God created is not a dead, static, unchanging thing. Rather, it teems with activity, with things happening, with life. Not only does the creation exhibit an infinite variety of marvelously designed structures and relationships, but also there is an unlimited complexity of interactions between these systems.

These interactions are called processes, and the study of these processes is the function of scientists. Because of the great number of different systems and processes, it has been necessary for science to divide and subdivide itself over and over again. Not only are there physicists and

chemists, biologists and geologists, and other such basic scientists, but also physical chemists, organic chemists, nuclear physicists, classical physicists, and numerous other specialists within these basic disciplines. Many fields of science that once were special emphases in physics or one of the broad sciences have developed into independent branches of their own — sciences such as meteorology, hydrology, ecology, metallurgy, paleontology, and many others.

All of which points up both the extreme breadth and complexity of science and also the impossibility of any one scientist ever becoming a real firsthand authority in more than a very restricted scientific specialty. Furthermore, scientists as individuals are real people and therefore subject to the same conceits, prejudices, and other weaknesses as non-scientists. Scientists should accordingly be very cautious about making broad pronouncements on sociological or religious matters in the name of “science,” and laymen should be carefully skeptical about such pronouncements when scientists do make them.

In spite of the great number and variety of scientific processes, there are two statements that can be made about all of them without exception. These are the following:

1. All processes involve interchanges and conversions of an entity called *energy*, with the total energy remaining constant. Scientifically this is called the *law of conservation of energy*, or the first law of thermodynamics.
2. All processes manifest a tendency toward decay and disintegration, with a net increase in what is called the *entropy*, or state of randomness or disorder, of the system. This is called the second law of thermodynamics.

Thus, all the processes of nature are fundamentally processes of quantitative *conservation* and qualitative *disintegration*. These two laws, accepted by all scientists as the most universally applicable principles that science has been able to discover, were recognized only about a hundred years ago. However, these basic principles have been in the pages of the Bible for thousands of years, though not expressed in modern scientific terminology. The conservation principle is clearly set forth by the fact of a *completed* creation which is now being *sustained* by its Creator.

Colossians 1:16–17, for example, indicates both aspects of this truth. “By him were all things created . . . and by him all things consist.” Note that “created” is in the past tense. The Scripture does *not* say: “By him *are* all things *being* created.” Therefore, creation is not going on at present.

The word “consist” is a translation of the Greek word from which we get our English word “sustain.” Thus, the verse says in effect that “by him all things are sustained.” By the Lord Jesus Christ, all things — all systems and structures, all kinds of organisms and relationships — were created once for all in the past and are now being conserved.

This same principle — that nothing is now being created or destroyed — is also implied in many other passages. Examples include Hebrews 1:2–3: “He made the worlds . . . upholding all things by the word of his power”; 2 Peter 3:5–7: “By the word of God the heavens were of old, and . . . the heavens and the earth, which are now, by the same word are kept in store”; Psalm 148:5–6: “He commanded, and they were created. He hath also established them for ever and ever”; Isaiah 40:26: “Who hath created these things . . . for that he is strong in power; not one faileth”; and Nehemiah 9:6: “Thou hast made heaven, the heaven of heavens, with all their host, the earth, and all things that are therein, the seas, and all that is therein, and thou preservest them all.”

The first chapter of Genesis describes this creation, and it should be stressed as strongly as possible that it is only in the Bible that we can possibly obtain any information about the methods of creation, the order of creation, the duration of creation, or any of the other details of creation. Since, according to both Scripture and the first law of science, nothing is now being created, therefore the scientific study of present processes can reveal nothing about creation and God’s creative processes except that it must have taken place and that it was through processes not now operating. Denying this is the most fundamental fallacy in the evolutionary theory. Evolution assumes that these present processes are the same process by which all things have developed from primeval chaos into their present complexity. Both the Word of God and the first law of science say otherwise.

At the end of the account of creation, the record is very explicit and definite: “Thus the heavens and the earth were finished, and all the host of them. And on the seventh day God ended his work which he had made; and he rested on the seventh day from all his work which he had made. And God blessed the seventh day, and sanctified it: because that in it he had rested from all his work which God created and made” (Gen. 2:1–3).

This summary is very clear in its insistence that whatever methods God used in creating and making all things — including man himself — He stopped using. The present work of providence — of providing for the conservation and sustenance of all the basic entities that He had created — is of a different order altogether from His work of creation.

The Fall and the Curse

Superimposed on the conservation principle, however, is the decay principle. The second law of thermodynamics, no less than the first law, is a universal law governing all processes. Although energy is never destroyed, it continually becomes less available for further work. Everything tends to wear out, to run down, to disintegrate, and ultimately to die. All processes, by definition, involve change — but the change is not a change in the upward direction, such as the evolutionists assume.

Somehow it seems contrary to the nature and purposes of God that He would create a universe in which decay and death constitute one of the basic principles. He is a God of grace and power; as a gracious and merciful God, surely He would not build such a principle into His creation if He could avoid it. Since He is also omnipotent, He certainly did not have to do it that way. Why, then, do “we know that the whole creation groaneth and travaileth in pain together until now” (Rom. 8:22)? Is this what God intended, when He finished His creation and pronounced it all “very good” (Gen. 1:31)? Obviously not; God is not capricious, and we can be absolutely sure that He will accomplish His good purpose in creation.

The answer can only be that the second law is a sort of intruder into the divine economy, not a part of either the original creation or God’s plan for His eternal kingdom at least in its present form. The local entropy produced by friction, or digestion, etc., must have been fully offset by a decrease in entropy elsewhere. God’s description of the entire creation as “very good” must tell us that at the time He said it, there was no disorder, no deterioration, no groaning and travailing, no suffering, and, above all, no death in the whole universe, “The heavens and the earth . . . and all the host of them” (Gen. 2:1).

The entire world was designed for man, and he was appointed by God to exercise dominion over it, as God’s steward. It was a perfect environment, and man was perfectly equipped to manage it. He should, certainly, have been content and supremely happy, responding in loving thanksgiving to His Creator who had thus endowed him.

God, however, did not create man as a mere machine. God’s love was voluntary, and for there to be real fellowship, man’s love also must be voluntary; in fact, an “involuntary love” is a contradiction in terms. Man was endowed with freedom to love or not love, to obey or not obey, as well as with the responsibility to choose. The history of over six thousand years of strife and suffering, crime and war, decay and death, is proof enough that he chose wrongly.

Sin came into the world when man first doubted, then rejected, the word of God, in the garden of Eden. And death came into the world when sin came into the world. God was forced to tell Adam, “Cursed is the ground for thy sake . . . for dust thou art, and unto dust shalt thou return” (Gen. 3:17, 19). The basic physical elements (“dust” of the “ground”) were thus placed under the curse, and all flesh constructed from those elements was also cursed. The classic passage of the New Testament on this subject is Romans 8:20–22:

For the creation was made subject to vanity, not willingly, but by reason of him who hath subjected the same in hope. Because the creation itself also shall be delivered from the bondage of corruption [or, more literally, “decay”] into the glorious liberty of the children of God. For we know that the whole creation groaneth and travaileth in pain together until now.

This universal “bondage of decay” can be nothing less than the universal principle that scientists have finally formalized as the second law of thermodynamics. By the same token, God’s “rest” at the end of His work of creating and making all things (Gen. 2:1–3), together with the providential sustenance of His creation ever since (Neh. 9:6), must constitute the universal principle now known as the first law of thermodynamics, the law of conservation of mass/energy.

Scientists have demonstrated the universality of the two laws, but they are unable to discover *why* they work. The answer to the question — Why should energy always be conserved and entropy always increase? — can be found only in these biblical records. There are many other biblical allusions to the first law (Col. 1:16–17; Heb. 1:2–3; 2 Pet. 3:5, 7; Ps. 148:5–6; Isa. 40:26; Eccles. 1:9–10; 3:14–15, etc.), and to the second law (Ps. 102:25–27; Isa. 51:6; 1 Pet. 1:24–25; Heb. 12:27; Rom. 7:21–25; Rev. 21:4; 22:3, etc.). It is significant that these two universal (and all-important) principles, discovered and formally recognized little more than a century ago, have been implicit in the biblical revelation for thousands of years.

The imposition of the principle of decay and death on the original creation was the result of man’s sin. God had to bring the curse upon both man and his dominion because of man’s rebellion against his Creator. “Cursed is the ground,” God told Adam (Gen. 3:17). The very ground out of which Adam’s body had been constructed, the dust of the earth, the basic elements of the creation, were thus brought into the “bondage of decay” (Rom. 8:21). “Yea, all of them shall wax old, as a garment” (Ps. 102:26).

The curse is not permanent and irrevocable, however, but only remedial and disciplinary. “The creation itself also shall be delivered from the bondage of decay into the glorious liberty of the children of God” (Rom. 8:21). “There shall be no more curse” (Rev. 22:3). “We, according to his promise, look for new heavens and a new earth, wherein dwelleth righteousness” (2 Pet. 3:13).

At the same time that God pronounced the curse, He also promised the coming Redeemer, the seed of the woman (Gen. 3:15), who would someday provide salvation, both for individual persons and for the whole creation.¹

The Genesis Flood

One of the most remarkable phenomena associated with the earth’s crust is the abundance of fossil remains of animals buried and preserved therein. Since these fossilized animals obviously were once living and are now dead, they must have died only after death entered the world when Adam sinned (Rom. 5:12). Although the Bible never mentions fossils as such, it does speak of a time when “all flesh died that moved upon the earth, both of fowl, and of cattle, and of beast, and of every creeping thing that creepeth upon the earth, and every man: All in whose nostrils was the breath of life, of all that was in the dry land, died” (Gen. 7:21–22). This, of course, was at the time of the worldwide flood that God sent on the earth in the days of Noah.

Most creationists are convinced that the key to the real understanding of the fossil-bearing sedimentary rocks is nothing less than the great flood of the days of Noah. The fossils speak, not of the gradual evolution of life on earth over vast ages, but rather of the sudden extinction of life, all over the world, in one age.

There was never such an opportunity for production of fossils as in the great Flood. Neither was there ever, before or since, such an opportunity for the formation of vast beds of sediment and for their rapid conversion into sedimentary rock, as in the great Flood. “And every living substance was destroyed which was upon the face of the ground, both man, and cattle, and the creeping things, and the fowl of the heaven; and they were destroyed from the earth: and Noah only remained alive, and they that were with him in the ark” (Gen. 7:23).

The curse and the Flood constitute a permanent witness to us concerning God’s hatred of sin and His desire to call men to repentance.

1 See Henry M. Morris’s commentary, *The Genesis Record* (Grand Rapids, MI: Baker Book House, 1979), p. 105–132, for a more complete discussion of these topics.

Every process that we experience in our daily lives should continually remind us of the judgment of the curse, and every feature that we see as we look at the world around us should remind us of the judgment of the Flood. All that we see and all that we experience are constantly telling us that we are out of fellowship with our Creator and urgently need the Savior.

But all fallen men are perverse, and their imaginations are evil. Instead of responding to the remedial purposes of the curse, early men and women tried to circumvent it and soon became so irretrievably evil that God had to destroy the world with the Flood. Then, instead of gratitude for deliverance from the antediluvian morass of wickedness by the Flood, the descendants of the survivors soon manifested their own perversity by a new rebellion at Babel.

Man has now somehow, in his warped thinking, converted the universal decay principle into an imagined universal evolutionary process, and the worldwide testimony in stone concerning the Flood into a contrived record of the history of evolution. The Flood itself is explained away altogether, either as a local flood or a tranquil flood or an allegorical flood (these theories will all be evaluated in chapter 4, and eliminated as possible options).

Accordingly, God ceased to concern himself directly with mankind as a whole, after routing the conspirators at Babel, choosing rather to work through an elect nation, Israel, and then through an elect assemblage, the Church, to accomplish His redemptive work in the world. Not again would He impose another remedial curse of some kind on the ground, nor would He again send another world-purging cataclysm as long as He continued to offer salvation and redemption to man.

“While the earth remaineth,” He said, “seedtime and harvest, and cold and heat, and summer and winter, and day and night shall not cease” (Gen. 8:22). That is, the earth’s axial rotation and orbital revolution, which processes largely control all other terrestrial processes in the present economy, would remain unchanged, and so would all other processes until man’s temporal probation and God’s reconciliation were accomplished.

Origin of the Nations

Another great event in the ancient world has also had worldwide repercussions to this very day. That was the post-Flood rebellion led by Nimrod at the Tower of Babel, resulting in God’s miraculous confusion of languages of the various families gathered there. This, in turn, led to their dispersion from Babel and their eventual development into the many tribes and nations around the world.

Man is a unique creation of God, entirely without evolutionary relation to the animals, and Adam was the first man, created on the sixth day of creation. However, the present-day nations, tribes, cultures, and languages of men have all been derived from the three sons of Noah, after the great Flood. “And the sons of Noah, that went forth of the ark, were Shem, and Ham, and Japheth. . . . These are the three sons of Noah: and of them was the whole earth overspread” (Gen. 9:18–19).

For a time after the Flood, most of Noah’s descendants lived together in the Mesopotamian plain south of the mountains of Ararat, where the ark had landed. This settlement, in itself, was contrary to the will of God, who had commanded them to “Be fruitful, and multiply and replenish the earth” (Gen. 9:1). He had also entrusted to men the responsibility of governing themselves, in stable social units, even with the prerogative of capital punishment if the crime should so warrant (Gen. 9:6).

However, rather than obeying God’s command to scatter and fill the earth, their rebellious leader Nimrod persuaded most of the people (no doubt Noah and Shem, who apparently were still living, did not participate in Nimrod’s scheme, and this may have been true of others, too) to remain in one place, at Babel, and there to build a great tower dedicated to the heavens, to pagan gods of the sky.

The events are described in Genesis 11:1–9, and the leadership of Nimrod in Genesis 10:8–12. It is probable that there were approximately 70 family clans at Babel, as indicated by the 70 original tribes listed in Genesis 10:1–32. These included Semites and Japhethites, as well as Hamites.

Rather than moving out to “fill the earth,” as God had commanded, they all prepared to unite together in the form of a great city, in which they could “make us a name” (Gen. 11:4). This decision involved a direct rebellion against God’s command, and thus indicated that at least their leaders, especially Nimrod, no longer feared God.

They seemingly had been convinced, perhaps by some form of occult communication with demonic spirits, that they could successfully follow Satan in his continuing rebellion and thus be free from God’s restraint. They built the first great temple “tower, whose top [was to be] unto heaven” (Gen. 11:4), as the central headquarters of this rebellion. They probably emblazoned the various astrological emblems in the shrine at the top, thus dedicating the tower “unto heaven” — that is, to the worship of the host of heaven. The stars were identified with the host of satanic angels. This primeval astrological system is the fountainhead of all occultism, polytheism, and false religion in general. Babylon was the “mother of harlots and abominations” (Rev. 17:5). That is, Babel was the

primeval source of all spiritual adultery and idolatry in the world's false religions.

In any case, it was from Babel that God forcibly dispersed the rebels, by a mighty miracle. "The Lord did there confound the language of all the earth: and from thence did the Lord scatter them abroad upon the face of all the earth" (Gen. 11:9).

The skeptic may question this record, but let him devise a better explanation for the origin of human languages! The languages of even the most "primitive" tribes are extremely complex and are removed by a great gulf from the chatterings of the most "advanced" apes, as well as other animals. There is neither any evidence nor any explanation for any assumed naturalistic evolution of human language.

The attribute of language — the ability to articulate and communicate even abstract concepts — is the most basic aspect of any human culture. Physiological distinctives such as skin color are of minor importance compared to language as the cause of divisions among the nations and tribes of mankind. When God decided to enforce a separation and scattering of the people, He did so by the most effective way possible, confusing their tongues. After they were separated into distinct tribal units, then it was possible for distinctive physiological characteristics, hitherto inhibited by the intermarrying at Babel, to become fixed genetically, by tribal inbreeding. Thus, the different physical characteristics of different national groups were indirectly the result of the confusion of tongues.

The 70 original nations, as listed in Genesis 10, have proliferated into more than 3,000 tribes and languages. Since this primeval dispersion there have been many attempts by strong leaders to unite all nations under their rule, as well as efforts by politicians to establish voluntary unions of all nations, but every one has failed. This is because "the Most High divided to the nations their inheritance, when He separated the sons of Adam" (Deut. 32:8). God has "made of one blood all nations of men for to dwell on all the face of the earth, and hath determined the times before appointed, and the bounds of their habitation" (Acts 17:26).

It is well to recognize that, while the Scriptures place high importance on the distinctiveness of nations and tribes as such, they never once mention the concept of *race*. Biblically there is only one *race* of men: the human race. There is only one *kind* of man: that is, *mankind*. "God hath made of one blood all nations of men."

The idea of race is strictly a category of evolutionary biology, not of Scripture at all. The threefold division of mankind into Japhethites,

Semites, and Hamites is not a *racial* division, but, rather of three different streams of nations. The biological entity known as “race,” on the other hand, is supposed to be a sub-species in the process of evolving into a new species, with a long evolutionary history of its own. Modern racism has always found its strongest and most vicious expression among doctrinaire evolutionists, men such as Karl Marx, Adolph Hitler, and other such advocates of group struggle and survival of the fittest.

A real understanding of man in relation to his world will never be attained, nor solutions to his problems ever achieved, as long as our educational and political leaders persist in thinking of them in evolutionary categories. Man is not an evolved animal, and his cultures and institutions have not been developed from the herd-instincts of animals. Rather, he is a unique creation, made in the image of God, and his tribes and nations represent divisions established by God for man’s own good and for the ultimate accomplishment of His divine will on the earth, not through man’s own devices but by His power and grace.

Summary of the Biblical Model of Creation

In summary, the biblical model of earth history focuses on three great worldwide events: (1) a period of six days of special creation and formation of all things, the completion and permanence of which are now manifest in the law of conservation of energy; (2) the rebellion of man and the resultant curse of God on all man’s dominion, formalized now in the law of increasing entropy; and (3) the world-destroying flood in the days of Noah, leaving the new world largely under the domain of natural uniformity.

This framework does not, of course, preclude the occurrence of later events of worldwide implications, especially the confusion of tongues at Babel. The Flood itself occupied only a year, but the aftereffects were felt all over the world for many centuries.

The main key, however, to the true interpretation of the physical data relating to earth history, must lie in full recognition of the effects of creation, the curse, and the Flood. The evolutionary system, on the other hand, has tried to correlate all these data in a completely naturalistic framework that either rejects or ignores the significance of these events. It implicitly, if not explicitly, denies God as Creator, Redeemer and Judge.

Tragically, many Christians seek, by one means or another, to compromise Scripture with the assumed evolutionary history of the earth and man. These placating theories must be examined critically. As it is done, there is no intent to criticize or judge individual advocates of such

theories. Good Christian men have at one time or another, no doubt with excellent motives, promoted these various ideas. It is not the proponents, but the theories, that will be criticized. The Word of God must take first priority, and secondly, the observed facts of science, rather than the reputations of men. Each of these various compromising theories will be shown in subsequent chapters as unacceptable on biblical, theological, and scientific grounds. The only truly satisfactory model is the simple, literal, historical view of Genesis and science that is supported in this book.

Chapter 3

Attempts to Compromise on Creation

The biblical record of creation, fall, and Flood is so clear and straightforward, and so obviously written as a simple record of actual events, that it is amazing that large groups of influential Christians have tried to make it say something else. There seems to be no rationale for these efforts except the fear of ridicule and rejection by those of their colleagues who are committed to the evolutionary world view. Such Christians seem either ignorant or unconcerned about the fact that the evolutionary world view involves long ages of random evolutionary meandering, struggle, suffering, and death, culminating supposedly in the emergence of man.

Many of these compromising Christians profess allegiance to Christ and the Scriptures, and perhaps are quite sincere in thinking theirs is the only way that Christians can be intellectually reputable. Nevertheless, they are also quite wrong. The Bible is God's Word, verbally inspired by the Holy Spirit, free of error (God cannot lie!), and God the Holy Spirit means exactly what He says. The foundational nature of the doctrine of creation makes it supremely important for the Scriptures to be plain and clear on this subject, of all subjects! In fact, they could hardly be *more* clear than they are, just as they stand.

However, since so many professed Christians have been tempted to compromise on the subject of creation, we shall in this chapter summarize the reasons that such compromises are invalid and harmful. We shall try to avoid any *ad hominem* remarks, however, since we are more concerned to refute these harmful theories than to criticize their advocates.

Theistic Evolution

According to Scripture, all things were specially created by God in six days. Is it possible that God's method of "creation" might really have been what the modern evolutionist means by "evolution"? (The question as to the exact length or nature of these days of creation will be discussed later.) A popular cliché of neo-orthodox and liberal writers is to the effect that God has revealed in Scripture the *fact* of creation, but has left the *method* of creation to be worked out by scientists. This is merely a circuitous way of saying that the fact of evolution should be accepted *in the hope that* the scientists will allow the belief that God is the one controlling the process.

There are various forms of theistic evolution, and different terms that have been used. These include "orthogenesis" (goal-directed evolution), "nomogenesis" (evolution according to fixed law), "emergent evolution," "creative evolution," and others. None of these concepts are accepted among modern leaders of *evolutionary* thought, for they are all quite atheistic. The evolutionary scheme that is least objectionable to Christians is, of course, simply the idea that Jehovah used the method of evolution to accomplish His purpose in creation, as described in Genesis. This theory might be called "biblical evolution." Any sound approach to Bible exegesis, however, precludes this interpretation.

1. Creation of Distinct Kinds Precludes Transmutations between Kinds

The Scriptures are very clear in their teaching that God created all things as He wanted them to be, each "kind" with its own particular structure, according to His own sovereign purposes. The account of creation in Genesis 1, for example, indicates that at least ten major categories of organic life were specially created, each "after his kind." These categories are, in the plant kingdom: (1) grass, (2) herbs, (3) fruit trees. In the animal kingdom the specific categories mentioned are these: (1) sea monsters, (2) other marine animals, (3) birds, (4) beasts of the earth, (5) cattle, (6) crawling animals. Finally, man "kind" was created as another completely separate category. The phrase "after his kind" or its equivalent occurs ten times in this first chapter of Genesis.

Even though there may be uncertainty as to what is meant by "kind" (Hebrew *min*), it is obvious that the word does have a definite and fixed meaning. One "kind" could not transform itself into another "kind." There is certainly no thought here of an evolutionary continuity of all forms of life, but rather one of definite and distinct categories! Furthermore, the sense of the passage is that a great many different kinds were created in each of the nine major groups (excluding man) that are

specifically listed. There is certainly room for variations within each kind, as is obvious from the fact that all the different tribes and nations of men, with all their wide variety of physical characteristics, are within the human “kind.” The same must be true for the other kinds. Many different varieties can emerge within the basic framework of each kind, but at the same time such variations can never extend beyond that framework.

Remember that evolution teaches that all “kinds” of life descended from other “kinds,” ultimately all descending from a common ancestor. The creation of plants and animals “after their kind” implies that the omniscient God knew what form each should take, and in His omnipotence created them that way from the start. Note that each “kind” was not commanded to *reproduce* “after their kind,” even though we know from genetics that there are natural limits to variation. But what this phrase specifically says, repeated ten times in one chapter, is that plants and animal categories *did not evolve* from any other category. Evolutionary change was *not* involved in their origin.

This clear teaching of the creation chapter is accepted and confirmed in other parts of the Bible. For example, consider 1 Corinthians 15:38–39: “God giveth . . . to every seed his own body. All flesh is not the same flesh: but there is one kind of flesh of men, another flesh of beasts, another of fishes, and another of birds.”

Not only is such distinctiveness true in the organic realm of plants and animals, but also in the inorganic realm. “There are also celestial bodies, and bodies terrestrial: but the glory of the celestial is one, and the glory of the terrestrial is another” (1 Cor. 15:40). That is, the earth is quite different from the stars and the other planets (as has been abundantly confirmed in this age of space exploration), and therefore must have been the object of a distinct creative act by God. It was, in fact, created by God on the first day (Gen. 1:1–5), whereas the heavenly bodies were not made until the fourth day (Gen. 1:14–19).

Furthermore, even the stars (and this term in the Bible includes all celestial objects except the sun and moon), were each created with its own particular structure. “There is one glory of the sun, and another glory of the moon, and another glory of the stars: for one star differeth from another star in glory” (1 Cor. 15:41). The tremendous variety of heavenly bodies revealed by modern astronomy — planets, comets, meteors, white dwarfs, red giants, variable stars, star clusters, binary stars, dark nebulae, interstellar dust, radio stars, quasars, neutron stars, etc. — also confirms this statement. No two stars, out of the innumerable host of heaven, are exactly alike, even though they *look* alike superficially, as mere points of light. Each was created

with its own structure and purpose (though these matters are presently beyond our knowledge, perhaps awaiting exploration and utilization in the eternal ages to come). Although there are many theories to explain how the many “species” of stars and galaxies may have evolved from one into another, there is no observational evidence whatsoever of such imagined evolution.

Perhaps the most striking biblical statement of the absolute uniqueness of each of the foregoing created entities is found in 1 Corinthians 15:42–44: “So also is the resurrection of the dead. . . . There is a natural body, and there is a spiritual body.” That is, the radical difference in kind between man’s natural body and his glorified resurrection body (And obviously the one does not by natural processes evolve into the other!) is taken as analogous to the unbridgeable gaps between the created kinds of things in the present universe.

Numerous other passages in the Bible also clearly prove special creation, but those discussed above should be adequate to demonstrate that so-called “biblical evolution” is a semantic confusion, about like “inorganic metabolism” or “Christian atheism.” The Bible simply does not permit evolution in its hermeneutical system.

2. Evolution Contradicts the Bible Record of a Finished Creation

The fundamental premise of evolutionary philosophy is that the origin and development of all things can be understood in terms of basic natural laws and processes that can be studied in operation right now. This assumption flatly contradicts the biblical statement that “He rested from all his work which God created and made” (Gen. 2:3) after the six days of creation. “In six days the Lord made heaven and earth, and on the seventh day he rested, and was refreshed” (Exod. 31:17). “The works were finished from the foundation of the world” (Heb. 4:3). Scientifically, this scriptural statement of the completion of the creative process anticipated by thousands of years the discovery of the law of conservation of mass/energy. It is also significant that whenever the verb “created” is used in connection with the heavens and the earth, it is always in the past tense. Creation was a completed event of the past; it is *not* continuing in the present.

3. Evolution Contradicts the Universal Principle of Decay

Ever since God said “Cursed is the ground” (Gen. 3:17), the “creation itself” has been waiting to “be delivered from the bondage of corruption” (Rom. 8:21). “All flesh is grass . . . the grass withereth, the flower fadeth” (Isa. 40:6–7). “The earth shall wax old like a garment, and they that dwell therein shall die in like manner” (Isa. 51:6). There is in effect a universal principle of disintegration and death, both in the physical creation (“earth

shall wax old”) and in the living world (“all flesh is grass”). This is nothing less than the curse, pronounced by God on man’s entire dominion because of man’s sin, reflected in the scientific realm by the universal law of increasing entropy. It is obvious that the evolutionary concept of a universal process of order increasing from molecule to man is incompatible with the universal process of decay and decreasing order.

4. Evolution Is Incompatible with Christian Ethics

The essence of the evolutionary process is survival, because obviously no organism can contribute to evolution unless it survives and reproduces. The concept of natural selection entails a struggle for existence and the survival of the fittest. The weak and misfits are exterminated; the strong and fertile survive. If God had anything to do with the evolutionary process, it does seem strange that He would utilize a method which squarely contradicts the system of ethics He established for the man He created by this process. Jesus said, “Ye have heard that it hath been said, An eye for an eye, and a tooth for a tooth: But I say unto you, That ye resist not evil: but whosoever shall smite thee on thy right cheek, turn to him the other also” (Matt. 5:38–39). The chief good of evolution is struggle and survival, but the essence of Christianity is sacrifice and death, as demonstrated by our Lord Jesus Christ.

Theological Contradictions Apart from Scripture

Many people believe in God without any strong commitment to the Bible as His Word. Therefore, the fact that the teachings of the Bible cannot be harmonized with evolution is of no particular concern to them, since they accept the inspiration of Scripture only in a very loose and generalized way, if at all. To them the Bible is merely a valuable book in terms of religious insights and ethical values, but not in matters of science and history.

However, even apart from Scripture, there are still a number of serious contradictions in theistic evolution (assuming that the God who supposedly created things by this process is really a personal, eternal, omnipotent, omniscient, gracious, loving, purposive God). Most theistic evolutionists (not considering pantheistic evolution) would probably agree with such a concept of God, and, of course, that is the type of God revealed in the Bible. But if God is like that, it seems completely incongruous that He would use evolution as His method of creation, for the following reasons:

1. *Evolution is inconsistent with God’s omnipotence.* Since He has all power, He is capable of creating the universe in an instant, rather than having to stretch out His creating over eons of time.

2. *Evolution is inconsistent with God's personality.* If man in His own image was the goal of the evolutionary process, surely God should not have waited until the very tail end of geologic time before creating personalities. No personal fellowship was possible with the rocks and seas, or even with the dinosaurs and gliptodons.
3. *Evolution is inconsistent with God's omniscience.* The history of evolution, as interpreted by evolutionary geologists from the fossil record, is filled with extinctions, misfits, evolutionary cul-de-sacs, and other like evidences of very poor planning. The very essence of evolution, in fact, is random mutation, not scientific progress.
4. *Evolution is inconsistent with God's nature of love.* The supposed fact of evolution is best evinced by the fossils, which eloquently speak of a harsh world, filled with storm and upheaval, disease and famine, struggle for existence and violent death. The accepted mechanism for inducing evolution is overpopulation and a natural selection through extermination of the weak and unfit. A loving God would surely have been more considerate of His creatures than this. "One (sparrow) shall not fall on the ground without your Father" (Matt. 10:29), said Jesus.
5. *Evolution is inconsistent with God's purposiveness.* If God's purpose was the creation and redemption of man, as theistic evolutionists presumably believe, it seems incomprehensible that He would waste billions of years in aimless evolutionary meandering before getting to the point. What semblance of purpose could there have been in the hundred-million-year reign and eventual extinction of the dinosaurs, for example? "Let all things be done decently and in order," the Bible commands (1 Cor. 14:40).
6. *Evolution is inconsistent with the grace of God.* Evolution, with its theology of struggle for survival in the physical world, fits perfectly with the humanistic theory of works for salvation in the spiritual world. The Christian concept of the grace of God, providing life and salvation in response to faith alone on the basis of the willing sacrifice of himself for the unfit and unworthy, is diametrically opposite to the evolutionary concept (see Eph. 2:8–9).

Progressive Creation

A large group of evangelicals, sensitive to the traditional opposition to evolution in their own constituencies, have tried to circumvent this opposition while at the same time embracing the essential framework of the evolutionary system through what they call “progressive creation.”

A similar concept is called “threshold evolution.” Other labels have been suggested for these general concepts, but they are all semantic variants of the fundamental system of theistic evolution.

The idea in the progressive-creation approach is to suppose that, while life was developing over the vast span of geologic time the way evolutionists have imagined it, God intervened on various occasions to create something new that the evolutionary process could not accomplish unaided. Thus, the “progressive creationists” give a sort of “nod to God” every now and then, and they consider this an adequate accommodation to Scripture.

For example, early in the Tertiary period, God presumably stepped in to create *Eohippus*, the small three-toed “dawn horse.” He then withdrew to let subsequent horse evolution continue through the stages of *Mesohippus*, *Parahippus*, etc., until finally they developed into the modern *Equus*. Similarly, a long succession of humanoid forms developed from their unknown apelike ancestor until, at the right moment, God intervened and placed an eternal soul in one (or two) of them by special creative power.

Details vary considerably in the exposition of the progressive creation concept by various writers, with greater or lesser numbers of creative acts interspersed in the evolutionary process according to the taste of the writer. All, however, accept the basic framework of the evolutionary geological ages and visualize progressive creation as taking place over billions of years instead of six normal, 24-hour days.

A few such accommodationists even suggest that every new species was a special “mini-creation,” introduced by God at the appropriate point in earth history. They call this “creationism,” but, obviously, it is essentially the same as theistic evolution.

It is difficult to see any biblical or theological advantage that the progressive-creation idea has over a straightforward system of theistic evolution. Exactly the same theological problems as outlined in the preceding section still apply, whether the process is called theistic evolution, progressive creation, old-earth creationism or anything else.

In fact, if one were forced to choose between the two, theistic evolution seems less unreasonable and inconsistent with God than progressive creation. It involves one consistent process, always the same, established by

God at the beginning and maintained continually thereafter. Progressive creation, on the other hand, implies that God's creative forethought was not adequate for the entire evolutionary process at the beginning. He, therefore, frequently interfered in the process, setting it back in the right direction and providing enough creative energy to keep it going a while longer until He could get back later for another shot-in-the-evolutionary-arm.

Theistic evolution is creation by continuous evolutionary processes initiated by God. Progressive creation is creation by discontinuous evolutionary processes initiated by God, but having to be shored up by sporadic injections of non-evolutionary processes. Of the two, theistic evolution is less inconsistent with God's character. However, progressive creation may sound less offensive to college boards of trustees, contributing alumni, and supporting churches. Its purpose seems to be to permit Christian academics to say they believe in "creation," for the sake of their constituents, without incurring opposition and derision from their non-Christian evolutionist colleagues.

The Day-Age Theory

Theistic evolutionists and progressive creationists have argued that the geological ages have been so firmly established by science that it would be folly to question them and, therefore, some means of accommodating Genesis to geology must be devised. The most obvious way of attempting this is to interpret the Genesis account of creation in such a way that the ages of geology correspond to the history of creation. Since the latter is given in terms of six "days" of creative work by God, the creation week must somehow be expanded to incorporate all of earth history from its primeval beginning up to and including man's arrival. Hence, the "days" must correspond more or less to the geological "ages."

In fact, some writers have even built what they feel is a case for the divine origin of the Genesis account on the basis of an assumed "concordance" between the order of creation in Genesis 1 and the order of the development of the earth and its various forms of life as represented by the geological ages. That is, in both Genesis and geology, first comes the inorganic universe, then simple forms of life, then more complex forms of life, and finally man.

However, such a proposed concordance cannot be pressed successfully for more details than that. Theories about the early history of the earth and the universe are still quite varied and indefinite. The general order noted above is only what must be postulated for *either* creation or evolution and, therefore, proves nothing at all. That is, if the evolutionary ages really occurred, the necessary order must be from simple to complex.

Similarly, if God employed a six-literal-day week of special creation, as the Bible indicates, again the order must logically be from simple to complex, with the inorganic world first prepared for plant growth, which was then created for animal life, which was then created to serve man, who was finally created in God's image. Since the same order is clearly to be expected in both cases, the fact that it thus occurs in both cases has no apologetic value either way.

The day-age theory is normally accompanied by either the theory of theistic evolution or the theory of progressive creation. In the previous sections it was seen that neither theistic evolution nor progressive creation is tenable biblically or theologically. Therefore, the day-age theory must likewise be rejected. Nevertheless, in this section the day-age theory specifically will be considered, showing that it is quite unacceptable on both exegetical and scientific grounds.

1. The Proper Meaning of "Day" and "Days"

The main argument for the day-age theory, other than the desire to obtain a framework corresponding to geological theory, is the fact that the Hebrew word *yom* does not have to mean a literal day, but can be interpreted as "a very long time." Specific biblical warrant for such an interpretation is presumably found in 2 Peter 3:8, "One day is with the Lord as a thousand years."

There is no doubt that *yom* can be used to express time in a general sense. In fact, it is actually translated as "time" in the King James translation 65 times. On the other hand, it is translated as "day" almost 1,200 times! In addition, its plural form *yamim* is translated as "days" approximately 700 times. It is obvious, therefore, that the normal meanings of *yom* and *yamim* are "day" and "days," respectively. If a parabolic or metaphorical meaning is intended, it is always made obvious in the context. In approximately 95 percent of its occurrences, the literal meaning is clearly indicated.

Even in those cases where a general meaning is permitted in the context, it is always indefinite as to duration, such as the "time of adversity" or the "day of prosperity." In fact, it would be very difficult to find even a single occurrence of *yom* that could not be interpreted to mean a literal solar day, and would *have* to mean a long period of time. (Moses *never* used it this way.) Whenever other biblical writers really intended to convey the idea of a very long duration of time, they normally used some such word as *olam* (meaning "age" or "long time") or else attached to *yom* an adjective such as *rab* (meaning "long"), so that the two words together, *yom rab*, then meant "a long time." But *yom* by itself can apparently never

be proved, in one single case, to *require* the meaning of a long period of time, and certainly no usage that would suggest a geological age.

It might still be contended that, even though *yom* never *requires* the meaning of a long age, it might possibly *permit* it. However, the writer of the first chapter of Genesis has very carefully guarded against such a notion, both by modifying the noun by a numerical adjective (“first day,” “second day,” etc.), and also by indicating the boundaries of the time period in each case as “evening and morning.” Either one of these devices would suffice to limit the meaning of *yom* to that of a solar day, and when both are used, there could be no better or surer way possible for the writer to convey the intended meaning of a literal solar day.

To prove this, it is noted that whenever a limiting numeral or ordinal is attached to “day” in the Old Testament (and there are over 200 such instances), the meaning is always that of a literal day. Similarly, the words “evening” and “morning,” each occurring more than a hundred times in the Hebrew, *never* are used to mean anything but a literal evening and a literal morning, ending and beginning a literal day.

As added proof, the word *yom* is clearly defined the first time it is used. God defines His terms! “And God called the light Day, and the darkness he called Night. And the evening and the morning were the first day” (Gen. 1:5). The word *yom* is defined here as the light period in the regular succession of light and darkness, which, as the earth rotates on its axis, has continued ever since. This definition obviously precludes any possible interpretation as a geological age.

The objection is sometimes raised that the first three days were not days as they are today, since the sun was not created until day four. One could, of course, turn this objection against those who raise it. The longer the first three days, the more catastrophic it would be for the sun not to be functioning if indeed the sun is the only possible source of light for the earth. The vegetation created on the third day might endure for a few hours without sunlight, but hardly for a geological age!

Regardless of the precise length of the first three days, there must have been some source of light available to separate light and darkness, evening and morning. It was apparently not the sun as it is now known, but, of course, God is not limited to the sun as a source of light.¹ Whatever it may have been, the earth was evidently rotating on its axis, since evenings and mornings were occurring regularly for those three days. The placing of the

1 In fact, as noted before, it may well be that the light source for the first three days was the stream of light waves formed directly by God as if already in transit from the light source which would be formed to generate them beginning on the fourth day.

two great “light-bearers” in the heavens need have no great effect on the rate of this rotation, so that the duration of day four and those following was most probably the same as that of days one through three.

It is interesting also that Genesis 1:14–19 further clarifies the meaning of “day” and “days”: “Let there be lights in the firmament of the heaven to divide the *day* from the night; and let them be for signs, and for seasons, and for *days*, and years . . . the greater light to rule the *day*, and the lesser light to rule the night . . . and the evening and the morning were the fourth *day*.” It would certainly seem that there could be no possible doubt as to the meaning and duration of *day* after at least this fourth day.

In view of all the above considerations, it seems impossible to accept the day-age theory, regardless of the number of eminent scientists and theologians who have advocated it. The writer of Genesis 1 clearly intended to describe a creation accomplished in six literal days. He could not possibly have expressed such a meaning any more clearly and emphatically than in the words and sentences which are actually used.

Not only is a six-literal-day creation taught in Genesis, but also in Exodus within the Ten Commandments. The Fourth Commandment says: “Remember the sabbath day, to keep it holy. Six *days* shalt thou labor, and do all thy work: But the seventh *day* is the sabbath of the Lord thy God. . . . For in six *days* the Lord made heaven and earth, the sea and all that in them is, and rested the seventh *day*, and hallowed it” (Exod. 20:8–11).

It is quite clear that the six work days of God are identical in duration to the six days of man’s work week. The basis for this very precise commandment is trivial and vacuous otherwise. The observance of seven-day weeks, all through history, and all over the world, with no astronomical basis, is further evidence.

Furthermore, the plural *yamim* is used here for the six work “days” of God. This word is used more than 700 times in the Old Testament. In none of these occurrences can it be proved to have any meaning except that of literal days.

Two or three secondary arguments relating to the word “day” need to be mentioned. It is frequently urged that since it is not used in a strict literal sense in Genesis 2:4, which says, “These are the generations of the heavens and of the earth when they were created, in the *day* that the Lord God made the earth and the heavens,” it is proper also to interpret it that way in Genesis 1.

At the most, of course, the interpretation could be rendered “in the time that the Lord God” and this has been already recognized as a proper

use of *yom* when the context so justifies. The context does *not* so justify in Genesis 1, as has been seen. On the other hand, this verse (Gen. 2:4) seems primarily to refer to the first day of creation when, as stated in Genesis 1:1, “God created the heavens and the earth.” But even if the context identifies the entire creation week, that was only six solar days. There is no victory here for those who would advocate long ages.

Another argument has been that since God is still “resting” from His work of creation, and since the seventh day is not concluded by the phrase “evening and morning,” the seventh day is still continuing. Then, if the seventh day has a duration of at least 6,000 years, the other six days also may have been long periods. The Jehovah’s Witnesses’ denomination, in fact, teaches this, maintaining that since the seventh day is 7,000 years in length (including the coming millennium), each of the days is 7,000 years, so that God’s work week was 42,000 years long! Theistic evolutionists or progressive creationists would, on the same basis, have to say that God’s rest day has been at least a million years long since the appearance of man on earth.

Such exegesis is strained, to say the least. The verse does not say, “God *is resting* on the seventh day,” but rather, “God *rested* on the seventh day.” Exodus 31:17 even says, “. . . in six days the Lord made heaven and earth, and on the seventh day he rested, and was refreshed.” It is recorded that God “blessed” and “sanctified” the seventh day (Gen. 2:3), but such a beatitude can hardly apply to this present evil age. God’s rest was soon to be interrupted by the entrance of sin “into the world, and death by sin” (Rom. 5:12), so that He had to set about the work of redeeming and restoring His groaning creation. As Jesus said, “My Father worketh hitherto, and I work” (John 5:17). Were it not for the weekly rest day, recalling God’s all-too-brief rest after creation, and now also commemorating His victory over death and the grave, “All the works that are done under the sun . . . [are] vanity and vexation of spirit” (Eccles. 1:14).

Similarly, the verse 2 Peter 3:8, “One day is with the Lord as a thousand years,” has been badly misapplied when used to teach the day-age theory. In its biblical context, it teaches exactly the opposite, and one should remember that “a text without a context is a pretext.” Peter is dealing here with the conflict between uniformitarianism and creationism prophesied in the last days. He is saying that, despite man’s naturalistic scoffings, God can do in one day what, on uniformitarian premises, might seem to require a thousand years. God does not require eons of time to accomplish His work of creating and redeeming all things. It is even interesting that using the above equation — one day for a thousand years or 365,000 days — the actual duration of God’s work with the earth and man — say about 7,000 years — becomes

about two and a half billion years, which is at least on the order of magnitude of the “apparent age” of the world as calculated by uniformitarianism!

2. Contradictions between Genesis and the Geological Ages

Even if it were possible to understand “day” in Genesis as referring to something like a geological age (and it is not hermeneutically possible, as just seen), it still would not help any in regard to the concordist motivation. The vague general concordance between the order of creation in Genesis and the order of evolutionary development in geology (and as noted earlier such a vague concordance is to be expected in the nature of the case and thus proves nothing) becomes a morass of contradictions when we progress to an examination of details.

At least 25 such contradictions exist. Note just a few of them:

Uniformitarianism	Bible
Matter existed in the beginning	Matter created by God in the beginning
Sun and stars before the earth	Earth before the sun and stars
Land before the oceans	Oceans before the land
Sun, earth’s first light	Light before the sun
Contiguous atmosphere and hydrosphere	Atmosphere between two hydrospheres
Marine organisms, first forms of life	Land plants, first life forms created
Fishes before fruit trees	Fruit trees before fishes
Insects before birds	Birds before insects (“creeping things”)
Sun before land plants	Land vegetation before the sun
Reptiles before birds	Birds before reptiles (“creeping things”)
Woman before man (by genetics)	Man before woman (by creation)
Rain before man	Man before rain
Creative processes still continuing	Creation completed
Struggle and death necessary antecedents of man	Man, the cause of struggle and death

The previous very sketchy tabulation shows conclusively that it is impossible to speak convincingly of a concordance (harmony) between the geological ages and Genesis. As with the question of evolution or creation, the Genesis record is stubbornly intransigent and will not accommodate the standard system of geological ages. A decision must be made for one or the other — one cannot logically accept both!

3. Identification of the Geological Ages with Evolutionary Suffering

The most serious fallacy in the day-age theory is that it impugns the character of God. It provides the basic exegetical framework for either so-called biblical evolutionism or for progressive creationism. These concepts have been discussed and rejected in the preceding section on this very basis. The God described in the Bible (personal, omnipotent, omniscient, purposeful, gracious, orderly, loving) simply could not use such a process of creation as envisaged by leading evolutionists, with all its randomness, wastefulness, and cruelty.

But Christians must also realize that the geological ages are actually *synonymous with evolution!* When they accept the geological ages, they are implicitly accepting the evolutionary system (though many do not realize it, and would even deny it).

The geological ages obviously provide the necessary framework of time for evolution. If the universe began only several thousand years ago, then evolution is impossible. It requires billions of years to have even a semblance of plausibility.

Conversely, the only real assurance men have of the geological ages is the assumption of evolution. That is, since evolution “must” be true (the only alternative is creation!), therefore, it is “known” that life, the earth, and the universe must be extremely old. The various geological systems and epochs are identified, and even *named* (e.g., Paleozoic — meaning “ancient” life — and Mesozoic — meaning “middle” life) on the basis of the fossils found in the rocks, interpreted and dated on the basis of the *supposed* “stage-of-evolution” of the corresponding faunas. Whenever any other identification or dating technique (lithology, radiometry, etc.) conflicts with this approach (as is often the case), these paleontologic criteria always govern.

Thus, evolution is the basis for interpreting the fossil record, and the fossil record is the basis for establishing and identifying the geological ages. The geological ages, with their fossil sequences, provide the basic framework and the only evidence of any consequence for evolution. Here is one of the most classic and subtle examples of pseudo-scientific circular reasoning in all the complex history of metaphysical opposition to biblical

creationism. The Bible-honoring Christian needs to realize that the geological ages are merely one component in the whole evolutionary package. If one wants to have the framework (geologic time), the glue that keeps it together (evolution) must also be accepted.

Again, however, even if one deliberately rejects or ignores the evolutionary implications of the geological ages, one must still face the massive problem of why God chose to use five billion years of chance variations, mutation, natural selection, geological upheavals, storm, disease, extinctions, struggle, suffering, and death as an inscrutable (but seemingly savage) prelude to His creation of man right at the very tail-end of geologic time. “God is not the author of confusion” (1 Cor. 14:33). Yet, He is said to have surveyed the whole monstrous spectacle and pronounced it all “very good” (Gen. 1:31). The Bible is quite explicit in teaching that there was no suffering and no death of sentient life on the earth before man brought sin into the world (Gen. 3:14–19; Rom. 5:12; 8:20–23; 1 Cor. 15:21–22; Rev. 21:4–5; etc.). But if the rocks of the earth’s crust were already filled with fossilized remains of billions of animals, and even of hominid forms that looked like men, then God himself is directly responsible for creating suffering and death, not in judgment upon rebellion, but as an integral factor of His work of creation and sovereign rule. And this is theological chaos!

4. Variants of the Day-Age Theory

Some expositors, acknowledging that exegetical honesty compels recognition of the “days” of Genesis as literal days, have tried two other devices for harmonizing the geological ages with literal days. One method is to suggest that the literal creative days were each separated by vast spans of geologic time. The other is that the six days were six days of *revelation*, rather than *creation*.

As to the first theory, it should be noted that the six widely separated days of creation included creation of the earth, heaven, the stars, sun and moon, oceans, lands, plants, fishes, birds, reptiles, mammals (all of them), and man. Nothing much is left for the vast spans of time between the days, so why are they needed? (This theory is essentially the same as the “progressive-creation theory,” which has already been discussed.)

As for the revelatory-day theory, there is not a single word in the entire record that suggests such a thing. Visions and revelations of the Lord are frequently encountered in Scripture, but the writer always *says* so, when it *is* so. In refuting such an extraneous idea, God himself said, “In six days, the Lord made heaven and earth, the sea, and all that in them is, and rested the seventh day” (Exod. 20:11). (Why should He wish to rest on the seventh

day, if all His actual work on each of the previous days consisted of about one minute of speaking to some unidentified vision-recipient?)

In addition, all the previously mentioned scientific contradictions and theological fallacies apply in exactly the same way to the isolated-day and the revelatory-day theories as they do to the standard day-age theory. The conclusion is, therefore, that the day-age theory *in any form* is unacceptable biblically, scientifically, and theologically.

The Gap Theory

The Christian who desires to accommodate the geologic-age system in his theology must somehow fit it into the creation record of Genesis 1. Since the first chapter of Genesis covers the creation of all forms of life, including man, it is obvious that the geological ages could not have occurred *after* the creation week. In the preceding section, dealing with the day-age theory, it was shown conclusively that the ages of geology did not occur *during* the creation week. The only other possibility, if they occurred at all, is that they took place *before* the creation week. This latter theory is popularly known as the “gap theory,” since it places the geological ages in a supposed gap between Genesis 1:1 and Genesis 1:2.

There are a variety of views on the gap theory, but in its usual form it assumes primeval creation as stated in Genesis 1:1. “In the beginning God created the heavens and the earth.” This creation, coming directly from the creative hand of God, is supposed to have been complete and beautiful in every respect. Genesis 1:2 is then said to describe a different condition of the earth, many eons after the primeval creation. It is argued that the connective word, *waw*, at the beginning of verse 2, can be translated as either “and” or “but,” and that the verb, *hayetha*, can be translated as “became,” instead of “was.” Furthermore, the phrase “without form and void” (*tohu va bohu*) is translated by some as “ruined and empty.” Putting all this together, Genesis 1:1–2 becomes: “In the beginning God created the heavens and the earth; but the earth became ruined and empty, and darkness was upon the face of the deep.”

The geological ages are then placed in the interval after the primeval creation and before the ruined condition of the earth described in verse 2. It is usually held that some gigantic cataclysm terminated the geological ages, leaving the earth shattered and uninhabited and surrounded by darkness.

Then, according to this theory, God proceeded to “re-create” or “re-make” the earth in the six literal days described in Genesis 1:3–31. Those who advocate the gap theory are, of course, anti-evolutionists and believe that God created all things in the present world by special creation in the

six-day creation week. However, they do not hold to a recent creation of the earth itself, since it dates from Genesis 1:1, the date of which presumably could be any number of billions of years in the past. A rather common cliché among these fundamentalists has been to this effect: “Let the geologists have all the time they want; the Bible does not give the date of the earth’s creation. All the vast expanses of geologic time are irrelevant to the biblical record, since they occurred before Genesis 1:2.”

Many holding this theory, though not all, have found it convenient to place the fossils of dinosaurs and “ape-men” and other extinct forms of life in this great gap, hoping thereby to avoid having to explain them in the context of God’s present creation. Others have tended to postulate only a partial pre-Adamic cataclysm, allowing plant seeds from the pre-world to survive, and even certain pre-Adamite hominids to survive in order to provide a wife for Cain (Gen. 4:17) and mothers for the “giants” (Gen. 6:4). For the most part, however, expositors advocating the gap theory believe the cataclysm to have devastated the whole world, leaving it completely waste and empty.

1. Death before Sin

This interpretation does seem superficially to provide an easy solution to the problem of the geological ages. The difficulty is that it is much *too* superficial. It solves the problem by ignoring it.

The geological-age problem is more complex than merely accounting for five billion years of time. Much more important is what took place *during* those years. Five billion years of geological ages means four billion years of organic evolution, accompanied by universal suffering, struggle, and death. As already pointed out, the very existence of the geological ages is based on evolution, and the identification of their various subdivisions depends on the supposed stage-of-evolution of the fossils found in the corresponding sedimentary rocks. Furthermore, whatever the fossils really say about evolution, one thing is sure, they speak of death — and violent, sudden death at that!

If the geological ages are real, then the evolutionary succession of life on earth that identifies those ages is also real. The gap theory does not settle the evolution problem for the fundamentalist; it merely inserts it in the gap before Genesis 1:2, and indeed makes it even worse. Not only is the entire evolutionary system still intact, but the added problem exists as to why God suddenly terminated the evolutionary process and then began again with six days of special creation — especially since the plants and animals and men that He created all had their counterparts in the world He had just destroyed.

There seems no way of avoiding the conclusion — if the geological ages really occurred before Genesis 1:2, that is — that God was using the same processes which exist in the present world to develop the pre-Adamic world. Sedimentation, volcanism, and the other present geological processes are clearly evident throughout the geological column. So are disease, decay, and death! And yet, this was supposedly ages before man brought sin into the world, and death by sin. Is God actually the author of evil and death, as the gap theory suggests?

2. The Fall of Satan after the Geological Ages

The great pre-Adamic cataclysm, which is basic to the gap theory, also needs explanation. It needs scientific explanation, for one thing, but more importantly it needs theological explanation. Why would the Creator spend billions of years developing a world and then suddenly reduce it to chaos in a shattering cataclysm? Or why would He allow it to develop on its own, then destroy it and re-create the same plant and animal types that had evolved?

The explanation commonly offered is that the cataclysm was caused by Satan's rebellion and fall as described in Isaiah 14:12–15 and Ezekiel 28:11–17. Lucifer — the highest of all God's angelic hierarchy, the anointed cherub who covered the very throne of God — is presumed to have rebelled against God and tried to usurp His dominion. As a result, God expelled him from heaven, and he became Satan, the great adversary.

Satan's sin and fall, however, were in heaven on the "holy mountain of God," not on earth. There is, in fact, not a word in Scripture to connect Satan with the earth prior to his rebellion. On the other hand, when he sinned, he was expelled from heaven *to* the earth. The account in Ezekiel says: "Thou wast perfect in thy ways from the day that thou wast created, till iniquity was found in thee . . . therefore I will cast thee as profane out of the mountain of God: and I will destroy thee, O covering cherub, from the midst of the stones of fire. Thine heart was lifted up because of thy beauty, thou hast corrupted thy wisdom by reason of thy brightness: I will cast thee to the ground [or 'earth,' the same word in Hebrew]" (Ezek. 28:15–17).

There is, therefore, no scriptural reason to connect Satan's fall in heaven with a cataclysm on earth. He was banished to the earth as a defeated foe. It seems much more probable that his expulsion to the earth was directly connected with man's presence on earth. It seems plausible that Satan first became resentful and envious because of God's great plan for man, and that this was a major factor leading to his rebellion. God cast him to the earth, where he was permitted to test man's faithfulness to his Creator, to see whether he, too, would desire to "be as gods."

That Satan was not on earth, at least not as a wicked rebel against God, prior to Adam's creation is quite definite from Genesis 1:31: "And God saw *every thing* that he had made, and . . . it was very good." As a matter of fact, the next verse indicates that this observation included "the heavens and the earth, and all the host of them," so that everything was good in heaven! Therefore, Satan's sin must have occurred *after* man's creation.

It has occasionally been suggested that man's creation was God's response to Satan's rebellion. The idea is that God is teaching a great object lesson to Satan and his angels; since they had not kept their first estate, God created man in Satan's place. Then, when Satan brought about man's fall also, God decided to redeem man in order to demonstrate His power and grace before the watching angels.

There is no doubt that the angels are intensely interested in God's great work of salvation (1 Cor. 4:9, 6:3; Eph. 3:10; 1 Pet. 1:12), but this is not because it was an afterthought on God's part. Rather, it is because their very purpose in being created was to participate in God's plan for man: "Are they not all ministering spirits, sent forth to minister for them who shall be heirs of salvation?" (Heb. 1:14). Throughout all the Scriptures, they are always thus seen as ministering in some way to man, particularly in relation to man's salvation and growth in grace.

Since the angels were created specifically for service to man, there is no reason to suppose that they were created much earlier than man. They were present to "shout for joy" when God "laid the foundations of the earth" (Job 38:7; Ps. 104:4-5). However, this erection of the lands upon foundations, when they had previously been "without form," probably refers to the work of the third day of creation, when the dry land was made to separate out of the waters: "and God called the dry land Earth" (Gen. 1:10).

In any case, the angelic rebellion in heaven could have had no effect on the earth and its supposed previous geological ages. Even if, for the sake of argument, it is assumed that Satan's sin *did* cause a pre-Adamic cataclysm on earth, that still would not account for the geological ages, with their evolutionary succession of identifying fossils, that had occurred *prior* to the cataclysm. The whole problem of eons of suffering and death has still not been resolved, for all this occurred not only before Adam sinned, but even, according to the gap theory, before Satan sinned!

3. Scientific Problems with the Gap Theory

The pre-Adamic cataclysm supposedly left the earth completely desolate and uninhabited, submerged in a universal ocean and universal

darkness (“waste and void, with darkness upon the face of the deep”). There was no light of the sun, no land surfaces, no vegetation, no animal life, even in the seas. Yet, in the fossil-bearing rocks, there seem to be clear evidences that a great abundance of plant and animal life existed all over the pre-world, on the land and in the sea.

Such a sudden transition from a world teeming with life and activity to one that was utterly ruined and empty, buried in water and darkness, must have required a geological cataclysm of overwhelming magnitude! The whole earth must have literally exploded, perhaps in a great nuclear or volcanic holocaust, destroying all life, causing all land surfaces to slide into the ocean, and filling the skies with such clouds of smoke and debris as to actually blot out the sun.

The problem is this: the pre-Adamic cataclysm has been postulated mainly as a means of reconciling the Bible with geology, but there is not the slightest evidence in the orthodox system of historical geology for such a cataclysm! No geologist accepts the gap theory for this very reason.

The whole system of modern geology has been built upon the dogma of uniformitarianism, not catastrophism. And it is the resulting system of geological ages that the gap theory attempts to pigeonhole between Genesis 1:1 and 1:2. One cannot have his cake and also eat it! The geological strata can be explained in terms either of global catastrophism or of uniformitarianism, but not of both together. If the strata were formed by a universal pre-Adamic cataclysm, then there remains no evidence for the geological ages, and, therefore, no need for the gap theory as far as the antiquity of the earth is concerned. One cannot harmonize the geological ages with the Bible by eliminating them!

It should be emphasized as strongly as possible that orthodox geology has no place for worldwide cataclysms. The strata are supposed to be explained by uniformity, by continuity of the processes of the past with those of the present. A worldwide cataclysm that could lead to the condition described in Genesis 1:2 simply does not exist in the standard system of geological ages, and it is unrealistic to identify the ice age or any other such local or regional geological feature with a cataclysm of such universal scope. Such a destructive cataclysm would have completely devastated and disintegrated the sedimentary strata and the fossils that are used as the evidence proving the geological ages.

If, for the sake of argument, it is supposed that there *was* such a cataclysm but that by some miracle it left the previously deposited strata intact and undisturbed, one still faces the formidable problem of the

relation between the fossil world and the present world. That is, the animals and plants preserved as fossils from the world before the cataclysm are in many cases practically identical with those in the present world. In fact, most of the kinds of organisms found in the world today have also been found in the fossils (often larger and more highly developed than their modern counterparts, but nevertheless of the same basic kinds). This is true even of human fossils, and of the various hominid forms suggested as possible precursors of man. This is one reason that various writers on the gap theory have postulated the existence of pre-Adamite men.

The problem is to explain why God would allow a cataclysm to destroy all life on the earth and then proceed to restock it with the same basic forms of life He had just destroyed. The God of the Bible is not capricious.

There *is* a great worldwide cataclysm described in the Bible, and that, of course, is the flood of Noah. This cataclysm is described in considerable detail and is frequently mentioned in later parts of the Bible, whereas the supposed pre-Adamic cataclysm is *never described at all*. The reasons, causes, and effects of the Flood are given. The Flood of water provides a satisfying explanation for the water-deposited sedimentary rocks and fossils and, therefore, eliminates any real scientific need for the geological ages. Thus, consistent advocates of the gap theory always downplay the flood of Noah's day as either local or of little global consequence.

Catastrophism *does* provide the key to the geological ages, not an imagined cataclysm before Genesis 1:2 that supposedly allows us to retain the geological age system, but, rather, the very real Noachian cataclysm which destroys it.

4. Biblical Problems with the Gap Theory

The biblical problems that the gap theory entails are no less damaging than the scientific difficulties. The summary statement of Genesis 2:1–3 seems clearly to include the whole universe: “The heavens and the earth . . . all the host of them . . . all his work which God created and made.” Or at least it comprehends the same universe as Genesis 1:1: “The heavens and the earth. . . .” In fact, no reference to the creation of the heavens occurs in the entire chapter except in Genesis 1:1, which therefore is included in the summary of Genesis 2:1.

This fact is made even clearer in Exodus 20:11: “In six days the Lord made heaven and earth, the sea, and all that in them is.” If this verse means what it says, then the creation of the heaven and the earth was included within the work of the six days. Therefore, the initial creative act of

Genesis 1:1 was a part of God's work on Day One, and there is no time for any significant "gap" before Genesis 1:2.

If anyone is impressed by the fact that "made" (Hebrew *asah*) is used in Exodus 20:11 instead of "created" (Hebrew *bara*), the phrase "all that in them is" should make it plain that the whole earth structure — not just the earth's surface — is included in the entities that were "made" in the six days. The gap theory, on the other hand, attributes most of the earth's crust, including the sedimentary rocks and their fossil contents, to the pre-world, and assumes that they remained in place during the great cataclysm and the subsequent six-day period of "re-creation." This view obviously contradicts the comprehensive statement of Exodus 20:11, regardless of whether *asah* is used in this verse (as it often is when God is the subject) to express essentially the same meaning as *bara*. In any case, it does not mean "re-made," as the gap theory requires.

Similarly, God's evaluation of "all that he had made" as "very good" (Gen. 1:31) is strange and grotesque if the sedimentary rocks under the feet of Adam and Eve were at the same time filled with the fossilized remains of billions of years of suffering and death, so that almost everywhere man would look on the earth, he would encounter this vast graveyard. It could hardly look "very good" to men; how could it be pronounced "very good" by God?

The exegesis required by the gap theory for the six days' work of Genesis 1 is also strained and forced, rather than natural and normal. Thus, "Let there be light," in verse 3 must be interpreted as "Let light pierce through the atmospheric debris following the cataclysm and again reach the earth's surface." Similarly, the simple statement of verse 16, "And God made two great lights . . . the stars also," must be understood as saying, "God removed all the cloud contamination still remaining from the cataclysm so that now the sun, moon, and stars could be seen again on earth." Similar strained translations are needed for other passages.

Furthermore, the translation required by the gap theory for Genesis 1:2 — "The earth *became* [instead of 'was'] waste and void" — is itself highly questionable. There is admittedly a difference of opinion among Hebrew scholars about whether this is a permissible translation, but it should be noted that practically all the generally recognized and standard Old Testament translations render the verb "was" instead of "became." It is the regular Hebrew verb of being (*hayetha*), instead of the verb that is normally used to denote a change of state (*haphak*). Although *hayetha* can, under some circumstances, be translated as "became" instead of "was," such a meaning must be clearly required by the context. In at least

98 percent of its occurrences in the Pentateuch it is properly translated as “was.” The question then is whether the internal context in Genesis 1:1–5 requires or justifies this unusual translation. Advocates of the gap theory have not yet shown this to be the case. In fact, the use of the connective “and” (*waw*) between Genesis 1:1 and 1:2 seems to imply that the state described in the second verse followed immediately upon the action described in the first verse. Verse 2 clearly consists of an explanation as to how the earth *was* at creation, not how it *became* later.

Actually, *every* verse in Genesis 1 (except the first) begins with “and” (Hebrew *waw*), implying continuous action. Many times a verse amplifies the meaning of the verse prior to it; thus there is no time implied at all. There seems to be no legitimate justification for allowing a gap between verses one and two. The entire chapter is one long run-on sentence!

It is recognized that a few Hebrew scholars argue vigorously that “became” should be used in verse 2. When experts and specialists disagree, it should perhaps be left an open question. Even if there *is* such a “gap” between the two verses, there is no contextual justification for understanding it as a gap of long duration. It could just as well have been, say, a minute or an hour, as five billion years.

Similarly, there is nothing in verse 2 to imply a great cataclysmic judgment from God. The initial aspect of creation as described in that verse was not “perfect,” in the sense that it was “complete,” until God pronounced it complete and “very good” at the end of the six days of His creative work. But it was perfect for His immediate purpose.

One would be justified in concluding, therefore, that the “gap” exegesis of Genesis 1:1–2 is very tenuous.

5. Critique of Proof-Texts for the Gap Theory

Although Genesis 1:1–2 does not lend itself well to the gap theory in its immediate context, there are several suggested proof-texts for the theory that have been adduced from other parts of the Bible. These must now be examined. Regardless of these proof-texts, one should not forget the overwhelming scientific and theological difficulties inherent in the idea that the geological ages occurred between the two verses, and that these ages terminated in a global cataclysm. This theory should not be used to explain the geological ages or to justify a great age for the earth. The gap theory creates many serious scientific problems and solves none.

With this warning in mind, let us see whether the proof-texts really do *require* a gap interpretation. The first of these is Genesis 1:28, where God commands Adam and Eve to “Be fruitful, and multiply, and

replenish the earth.” The verb translated as “replenish” is the Hebrew *male*, which means simply “fill” or “be filled” or a similar expression. It is so translated in all the many other places where it is used, with only a few very questionable exceptions.

Jeremiah 4:23 is also frequently cited: “I beheld the earth, and lo, it was without form, and void; and the heavens, and they had no light.” This is quoted in a context of divine judgment, and so it is said that Genesis 1:2 likewise reflects such a judgment. It is quite certain, however, that the divine judgment described in Jeremiah 4:23 has nothing to do with Genesis, except that it uses similar expressions. It is a prophecy of a coming judgment on the land of Israel (see Jer. 4:14, 22, 31), not a history of past judgment on the earth. The words “earth” and “land” are the same in Hebrew. One can translate the verse correctly as follows: “I beheld the land, and lo it was waste and empty, and the sky, and it had no light.” This prophecy was to be fulfilled during the coming “day of Jacob’s trouble” (Jer. 30:7).

Another proof-text advanced is Isaiah 24:1: “Behold, the Lord maketh the earth empty, and maketh it waste, and turneth it upside down, and scattereth abroad the inhabitants thereof.” Again, in the context, this verse is quite obviously a prophecy of the coming judgment upon the land and the people of Israel, not upon a hypothetical race of pre-Adamites.

Their most important proof-text is Isaiah 45:18: “For thus saith the Lord that created the heavens; God himself that formed the earth and made it; he hath established it, he created it not in vain [the phrase ‘in vain’ is the Hebrew *tohu*, the same as ‘without form’ in Genesis 1:2], he formed it to be inhabited.”

The argument goes that, since the above verse says that God created not the earth *tohu*, and since the earth of Genesis 1:2 was *tohu*, therefore, the latter could not have been the earth as it was created in Genesis 1:1. The inference is that the earth became *tohu* by the pre-Adamic cataclysm.

Again, this interpretation requires lifting the verse out of its context. The verses before and after indicate that the subject at hand is Israel and God’s purposes and promises to His people. That is, just as the Lord had a purpose in creating the earth, so He has a purpose for Israel. In Isaiah 45:17, the preceding verse, He says, “Israel shall be saved in the Lord with an everlasting salvation: ye shall not be ashamed nor confounded world without end.”

In support of this tremendous promise, God reminds the Israelites of His mighty creation itself, which was not without purpose. He “formed it to be inhabited,” and He accomplished that purpose, creating and

redeeming (in Christ) a race of men in His own image. Just so, He will accomplish His purpose for His special people, Israel.

The fact that His full purpose in creation was not completed on the first day of creation is irrelevant. He “created it not in vain, he formed it to be inhabited,” and He accomplished that purpose. The word *tohu* has several shades of meaning, depending on context. It occurs 20 times and is translated 10 different ways in the King James translation. The context in Isaiah 45:18 justifies the translation “in vain” or “without purpose.” The context in Genesis 1:2 warrants “without form” or “structureless.”

There is no conflict, therefore, between Isaiah 45:18 and the statement of an initial formless aspect to the created earth in Genesis 1:2. The former can properly be understood as follows: “God created it not [to be forever] without form; he formed it to be inhabited.” As described in Genesis 1, He proceeded to bring beauty and structure to the formless elements, and then inhabitants to the waiting lands.

It should be remembered that Isaiah 45:18 was written many hundreds of years after Genesis 1:2, and that its context deals with Israel, not a pre-Adamic cataclysm. Such an isolated and incidental verse, which is easily capable of an alternate interpretation, is hardly an adequate base on which to build a theory of such tremendous import as that of a presumed primeval cataclysm.

Two verses in the New Testament have occasionally been used to support the gap theory. One is 2 Corinthians 4:6: “God, who commanded the light to shine out of darkness, hath shined in our hearts.” The darkness in the heart results from sin and is illuminated by the entrance of Christ. Just so, it is said, the primeval darkness must also have been a result of sin.

The analogy breaks down, however. The gap theory postulates a perfect world in the beginning, plunged into darkness, and then illuminated again when God commanded the light to shine out of darkness. A soul in darkness, however, is *born* in darkness. The true analogy would be with a world that was also born in darkness. Darkness is not evil in itself, since it was created by God. “I form the light, and create darkness” (Isa. 45:7). Perhaps this analogy even suggests the reason that God first created the world in darkness, so that the work of creation might serve as a pattern and type of the work of the “new creation” (2 Cor. 5:17) created by the Holy Spirit in the receptive heart.

The other verse is 2 Peter 3:6: “The world that then was, being overflowed with water, perished.” Although some have taken this as a reference to a pre-Adamic cataclysm, it is obvious that it refers instead to

the flood of Noah. The very word “overflowed” indicates this. It is the Greek word *kataklysmos*. In its noun form, it occurs four times (Matt. 24:38–39; Luke 17:27; and 2 Pet. 2:5), referring always to the flood of Noah. There has been only one global cataclysm in earth history, not two, and that was the great Flood described in Genesis 6–9.

One other interesting argument has been advanced. The phrase “foundation of the world” (Matt. 13:35 and nine other places) can be translated “casting-down [Greek *katabole*] of the world,” and the suggested idea is that it may refer to a primeval cataclysm. A foundation is “cast down” or “laid down,” so the word is used properly to mean “foundation,” as Greek scholars uniformly agree. There is nothing in the context of any of the ten occurrences to suggest such a novel interpretation as that of a primeval cataclysm. The phrase simply means “*foundation of the world*” and nothing more.

The lack of any clear biblical evidence for the gap theory, along with the highly equivocal nature of all its supposed proof-texts — in the context of its scientific fallacies and its serious theological problems — is adequate justification for rejecting it altogether. God does not speak in uncertain sounds (see 1 Cor. 14:8).

6. The Pre-Genesis Gap Theory

Dr. Merrill F. Unger and others have proposed a modified gap theory. Convinced that the Hebrew construction of Genesis 1:1–2 precludes a gap *between* these two verses, Unger suggests placing the angelic sin and pre-Adamic cataclysm *before* Genesis 1:1. In this view, the statement, “In the beginning God created the heavens and the earth,” refers to a *re-creation*, following the geological ages.

There is no biblical basis for this view. Unger was frank in saying that its basis was the necessity to accommodate the geological ages.

However, all the same scientific and theological objections to the gap theory that have already been presented apply with equal force to Unger’s modification of the theory. The geological ages that the theory tries to adopt are based upon the system of evolutionary uniformitarianism that Unger professed to reject. There is no room at all for the imaginary pre-Adamic cataclysm in the standard concept of geological ages.

Similarly, the existence of evil, suffering, and death in the world prior to the six days of creation week, and even prior to Satan’s rebellion — as required by the very concept of geological ages — seems explicitly precluded by the nature of God as a God of order, purpose, efficiency and love, as well as by such Scriptures as Genesis 1:31 (“very good”) and Romans 5:12 (“death by sin”).

The Framework Hypothesis

It has been seen that the geological ages cannot be placed *before* the six days of creation (gap theory), *during* the six days of creation (day-age theory), or *after* the six days (which, since they antedate man, no one suggests at all). The only remaining possibility is that either the six days or the geological ages had no existence in the first place.

To someone who is firmly committed to the geological ages (and therefore to evolution), there is no alternative but to give up belief in Genesis as an actual historical record of the events of creation. This is what all liberal theologians have done long ago, and what increasing numbers of evangelicals are tragically doing today.

Many of these latter wish to retain some kind of confidence in the divine inspiration of Genesis, rather than to reject it completely. Accordingly, they have tried to consider the creation story as some kind of literary device, rather than actual history. The “framework hypothesis” of Genesis 1–11 views these chapters as essentially a rhetorical framework within which are developed the grand spiritual themes of “creation” (the divine source and meaning of reality), of man’s “fall” (man’s ever-recurring experience of spiritual and moral inadequacy), and of “reconciliation” (the broad currents in history through which man is seeking to understand and appropriate spiritual meaning in life).

The particular “framework” in which these ideas are developed varies according to the particular expositor. Some speak of Genesis as “allegorical,” others as “liturgical,” others as “poetic,” others as “supra-historical.” All agree, however, in rejecting it as “scientific” or “historical.” They concur that Genesis teaches the *fact* of “creation” and the “fall,” but deny that it has anything to say concerning the *method*. They hope to retain whatever theological significance Genesis may have, while at the same time avoiding scientific embarrassment.

This type of biblical exegesis is out of the question for any real believer in the Bible. It is the method of so-called “neo-orthodoxy,” though such idealistic humanism is neither new nor orthodox. It undercuts the foundation of the entire biblical system of truth when it expunges Genesis 1–11. The events of these chapters are recorded in simple narrative form, as though the writer or writers fully intended to record a series of straightforward historical facts; there is certainly no internal or exegetical reason for taking these chapters in any other way.

Each chapter of Genesis 1–11 leads naturally into the next chapter. In the same way, Genesis 11, which gives the genealogy of the Messianic line down to Abraham, is followed logically by Genesis 12, which presents

the first recorded events in the life of Abraham. The latter events are within the period of recorded history, and are now almost universally accepted as factual. The life of Abraham, as the founder of the chosen nation Israel and the ancestor of Jesus Christ, is suspended without background or foundation if Genesis 1–11 is only an allegory.

Furthermore, the later writers of Scripture refer again and again to these early chapters of Genesis, always accepting them as both factual history and authoritative doctrine. Moses refers to the six-literal-day creation in Exodus 31:17 and to the division of the nations at Babel in Deuteronomy 32:8. Joshua 24:2 accepts the account in Genesis 11 of Abraham's ancestors. Although the later historical books are naturally more occupied with the histories of their own times, they occasionally refer back to earlier times. Hezekiah speaks of the creation (2 Kings 19:15) and 1 Chronicles 1:1–28 repeats the genealogies of Genesis 5, 10, and 11. After the captivity, Nehemiah likewise refers to the creation (Neh. 9:6). Job several times refers to both creation and the Flood (Job 9:5–9; 12:15; 26:7–13; 31:33; 38:4–7; etc.).

The Book of Psalms abounds in references to the creation. Psalm 8:3–8 speaks of God giving dominion over the earth to man. Psalm 33:6–9 emphasizes the instantaneous creative acts of God in the beginning. Psalm 90:2–3 speaks of creation and the fall of man. Psalm 148:1–5 tells of the creative acts of God. There are many other such references. Psalms 29 and 104 describe graphically the events during and following the great Flood. Even Proverbs 8:22–31 refers to the creation.

The prophetic books likewise refer often to the early chapters of Genesis. Isaiah refers both to the creation (40:26; 45:18) and to the Flood (54:9). Jeremiah 10:11–13, 31:35, and 51:15–16 all refer to different aspects of the creation. Ezekiel refers to Noah in 14:14, 20, and Amos also mentions the Flood, in both 5:8 and 9:6. Micah 5:6 refers to the “land of Nimrod,” as does Zechariah 5:11, who speaks of the “land of Shinar,” both passages obviously referring to Genesis 10:10.

But it is the New Testament that contains the clearest and most numerous references to Genesis 1–11. The apostle Paul mentions Adam and Eve several times in a manner demonstrating that he regarded them as real people, the first man and first woman on earth. Note the important discussions in Romans 5:12–19; 1 Corinthians 11:7–12, 15:21–22, 35–41, 45–47; 2 Corinthians 11:3; and 1 Timothy 2:13–15. The effects of the great curse on the earth are discussed in a classic passage in Romans 8:18–25.

The Book of Hebrews contains an important passage dealing with the completeness of the creation and God's seventh-day rest (Heb. 4:1–11).

Abel, Enoch, and Noah are listed as the first three of the great heroes of faith in chapter 11. Abel is again mentioned in 12:24.

The apostle Peter places great emphasis on the Flood (1 Pet. 3:20; 2 Pet. 2:4–5; and 2 Pet. 3:5–6). John refers to Cain and Abel (1 John 3:12). Jude also refers to Cain (verse 11), as well as to the sinning angels of Genesis 6:1–4 (verse 6), and to Enoch, as the seventh in the line of patriarchs from Adam listed in Genesis 5 (verse 14).

Most significantly of all, the Lord Jesus Christ himself frequently cited these early verses of Genesis in support of some of His most important teachings. His doctrine of marriage was based explicitly on a combined quotation from the first two (supposedly contradictory!) chapters of Genesis (Matt. 19:3–6; Mark 10:2–9; compare with Gen. 1:27 and 2:24). He compared the days of Noah, just before the universal flood, with the last days before His own return in worldwide judgment (Matt. 24:37–42; Luke 17:26–27). He even referred to Abel as the first martyr and first prophet (Matt. 23:35; Luke 11:51). He mentioned “the beginning of the creation which God created” (Mark 13:19). He called Satan the father of liars, no doubt referring to the devil’s lie to Eve in the Garden of Eden (John 8:44).

Likewise, the preaching of the gospel by the Early Church in the Book of Acts included references to these first Scriptures. Stephen (Acts 7:2–4) mentions Abraham’s background as given in Genesis 11:26–32. Paul preached from the witness given by the creation in Acts 14:15 and 17:24, mentioning also the first establishment of the nations in 17:26.

The fullest references to the beginning of things are found in the Book of Revelation, which describes the restoration and consummation of all things. In the letter to the apostate church at Laodicea, Jesus Christ reminds them that He is “the beginning of the creation of God” (Rev. 3:14). Frequent emphasis is placed on God as the Creator of all things (Rev. 4:11; 10:6; 14:7). In Revelation 14:6–7, the “everlasting gospel” is said to include recognition of Him “that made heaven, and earth, and the sea, and the fountains of waters.”

The great protevangelic promise of Genesis 3:15 is expanded and expounded in Revelation 12, which also includes reference to Satan as the serpent (verse 9) who had deceived all men. The prophecy of the development and fall of the final Babylon (chapters 17 and 18) undoubtedly is built upon the foundation furnished by the first Babylon of Genesis 10 and 11.

The last two chapters of the Bible, Revelation 21 and 22, describe the creation of the new heavens and new earth, just as Genesis 1 and 2 describe the creation of the first heavens and earth. In these last two chapters of the Bible — as in the first two — reference is made to the Bride; the personal

presence of God; the curse, in its fourfold aspect; the end of death; the removal of the curse; the ending of darkness; and the restoration of the tree of life and the river flowing out of the midst of Paradise.

Advocates of the framework hypothesis justify their view by pointing to the literary or poetic nature of Genesis 1–11. They reason that if a passage is poetic or contains some literary form, it need not be understood as actual history. It is true that such literary forms are contained in these beautiful passages. But where is it written that use of such beauty in writing means that the passage contains fallacious historical or scientific content?

This same technique that could supposedly be used to invalidate the creation, fall, Flood, and tower of Babel records, could also be applied to the virgin birth, the crucifixion, and the resurrection. In fact, many liberal theologians and philosophers do that very thing. But surely true Christian evangelicals have not yet abandoned those vital Christian doctrines.

Modern theologians who would eliminate the first 11 chapters of Genesis from the realm of true history are guilty of removing the foundation of all future history. They, in effect, reject the teachings of Peter and Paul and all the other biblical writers as naive superstition, and the teachings of the infallible Christ as deceptive accommodationism. Furthermore, their technique of interpretation would, if applied consistently to all of Scripture, invalidate all of Christianity. The “framework hypothesis” of Genesis, in any of its diverse forms, is nothing but neo-orthodox sophistry and inevitably leads eventually to complete apostasy. It must be unequivocally rejected and opposed by all Bible-believing Christians.

Chapter 4

Explaining Away the Flood

Christians who feel that they must re-interpret the biblical record of creation in order to allow for the 5 billion years of geological ages demanded by evolutionary geologists (not to mention the 15 billion years of cosmic history postulated by secular astrophysicists) cannot stop there. They must also do something about the Genesis Flood.

Since a worldwide cataclysmic deluge such as is described in the Bible would have destroyed all the evidences of the geological ages, it must somehow be explained away, either as a localized flood that devastated only a small region, or as a global “tranquil” flood that did not do anything of consequence, just oozing up over the mountains, then oozing down again, tranquilly. The great sedimentary rock beds of the earth, with their fossil graveyards, comprise the essential evidence for the geological ages, and they must somehow be left intact if the geological ages (and evolution!) are to be preserved. Therefore, the biblical record of the Flood must be vastly downgraded.

The fact is, however, that the Bible, God’s inspired and inerrant Word, records a global, world-destroying hydraulic cataclysm in the days of Noah. It will allow no other legitimate interpretation, as we shall now see.

The Local Flood Theory

The great Flood of Genesis 6–9 is of critical importance to the true understanding of earth history. It has been seen that sound biblical exegesis will not permit placing the geological ages either before or during the six days of creation. Neither can the six days of creation be interpreted as non-historical or allegorical. The only other alternative is to reject the standard system of geological ages altogether!

This is, of course, a drastic suggestion — orthodox geologists indeed reject it out of hand. However, there is no other alternative. If the Bible

is the Word of God — and it is — and if Jesus Christ is the infallible and omniscient Creator — and He is — then it must be firmly believed that the world and all things in it were created in six natural days, and that the long geological ages of evolutionary history never really took place at all.

This position forces one to find another explanation of the great sedimentary rock beds of the earth's crust, as well as the fossil record contained in them. All of the geological strata and formations, the great coal and oil deposits, the volcanic and glacial beds, the mountain ranges and geosynclines, and all the multitudinous phenomena of historical geology, interpreted for over a hundred years in terms of uniformity and evolution, must be re-evaluated in terms of the biblical framework of history. Furthermore, its integral association with the fossil record indicates that the whole geological column must have been formed *after the fall of man*. Fossils clearly speak of death, and the Scriptures teach plainly that, "by man came death" (1 Cor. 15:21).

The only possible explanation for the geological column and fossil record, consistent with Scripture, must therefore be sought in terms of the biblical deluge. And this tremendous worldwide cataclysm does provide a satisfactory framework within which to reinterpret these data.

If the Flood was really of the magnitude and intensity that the Bible indicates, then the entire case for evolution collapses. Evolution depends entirely on the fossil record as interpreted in terms of vast geological ages. If these did not take place, evolution is impossible.

It is not surprising, therefore, that orthodox geologists strongly oppose the idea of a worldwide flood. In view of this intense and almost unanimous opposition, many evangelical Christians insist that Genesis be reinterpreted in terms of a local flood. It is actually very common, as could be expected, to find the local-flood view combined with either the day-age theory or the gap theory. Since both of the latter theories seek to salvage the geological ages, and since a worldwide flood would eliminate the entire basis for them, it is obvious that the concept of a global deluge is incompatible with either theory.

It is not easy in the academic world to maintain a so-called "flood theory of geology." There are, no doubt, certain geological problems with such a position, but a far more real problem is the "flood" of scholarly wrath and ridicule that descends upon those who hold it — and that is no theory! The Genesis Flood, along with the record of recent creation which it supports, is the real crux of the conflict between the evolutionist and creationist cosmologies, and evolutionists invariably concentrate their strongest attacks at this point. Likewise, this is where Christians should

also marshal their strongest and most vigorous campaign. Sad to say, their strategy until recent years has almost completely ignored this crucial issue.

If the system of flood geology can be established on a sound scientific basis, and be effectively promoted and publicized, then the entire evolutionary cosmology, at least in its present neo-Darwinian form, will collapse. This, in turn, would mean that nearly every anti-Christian system and movement (communism, racism, humanism, libertinism, behaviorism, and all the rest) would be deprived of their pseudo-intellectual foundation.

These are the stakes involved, and it is no wonder that evolutionists have so opposed the historical fact of the global cataclysm known as the Genesis Flood.

It almost seems frivolous to try to show that the Bible teaches a worldwide flood. This fact is so obvious in the mere reading of Genesis 6–9 that one who does not see it there will hardly be influenced by other reasoning. For the record, however, a few of the many irrefutable formal arguments are summarized below.

1. The Height and Duration of the Flood

The scriptural record says that the Flood covered the tops of the highest mountains (Gen. 7:19–20) and that this situation prevailed until ten months (Gen. 8:5) after the Flood began. If the mountains were the same elevation then as now, as the local-flood theory would imply, the waters were at least 17,000 feet high (Mount Ararat, on which the ark rested, reaches this altitude) for a period of at least nine months. To require such a condition to be a “local” flood imposes impossible hydraulic demands on the water involved. One has to assume a sort of egg-shaped flood three miles high!

2. The Need for an Ark

The requirement for Noah to build a gigantic barge to “keep seed alive upon the face of all the earth” (Gen. 7:3) was unnecessary, to say the least, if it were to be only a local flood. The ark had a carrying capacity at least equal to that of 522 standard railroad stock cars, as can be quickly calculated from its recorded dimensions (Gen. 6:15). This is more than twice as large as necessary to accommodate two of every species of known land animal that ever lived. If the Flood were only a local or regional flood, it would be folly to spend 120 years to prepare an ark large enough to carry animals from the whole world. Its size was absurdly out of proportion for a mere regional fauna. Moreover, the latter animals (as well as humans) could easily have escaped a local flood by the obvious expedient of migrating to higher ground elsewhere.

3. Destruction of the Earth

The biblical description of the unique and overwhelming physical aspects of the Flood precludes a mini-flood. God said, in fact, He was going to destroy the earth (Gen. 6:13). The 40-day downpour (the “windows” of heaven were literally “floodgates”), the simultaneous cleavage of the vast “fountains of the great deep” (Gen. 7:11), the absence of rain before the Flood (Gen. 2:5), the establishment of the rainbow after the Flood (Gen. 9:13), and the fact that the waters “overtaken the earth” (Job 12:15) all are understandable only in terms of a unique worldwide cataclysm.

4. God’s Unbroken Promise

God’s unequivocal promise never again to send the Flood (Gen. 9:11) has been broken repeatedly if the Noachian flood were only a local flood. Therefore, the local-flood theory not only repudiates the plain meaning of the biblical record of the Flood, but even charges God with breaking His promises!

5. Testimony of Christ and the Apostles

The Lord Jesus Christ himself, as well as Peter (2 Pet. 2:5; 3:6) and the author of Hebrews, probably Paul (Heb. 11:7), confirmed that the Flood at least destroyed all mankind. Christ said, “the flood came, and destroyed them all” (Luke 17:27). The modern system of geology and archaeology, which the local-flood theory tries to accommodate, certainly includes a worldwide distribution of mankind long before any possible biblical date for the Flood. A flood that was anthropologically universal would certainly have to be geographically universal.

These and many other reasons that could be listed clearly prove that the biblical record teaches a worldwide flood. One could, in fact, prove this directly, merely by the experiment of a slow, thoughtful reading of Genesis 6–9, while trying to understand each verse as a description of a “local” flood. It will soon be realized what distortion of the plain sense of the inspired text this requires.¹

The Tranquil Flood Theory

Strangely and almost unbelievably, there have been a few competent geologists (Charles Lyell in the last century, J. L. Kulp, Davis

1 See *The Genesis Flood*, by J. C. Whitcomb and H. M. Morris (Philipsburg, NJ: Presbyterian and Reformed Co., 1961), p. 1–115, for an extensive treatment of these biblical evidences. Henry M. Morris also has a listing of 100 reasons for believing in the worldwide flood in *The Genesis Record*, (Green Forest, AR: Master Books, 1976) p. 683–686.

Young,² and others in the current generation) who have gone on record as believing in a worldwide *tranquil* cataclysm! At least they acknowledge the compelling witness of Scripture to a global Noahic flood, but then they abandon physical reality by imagining that such a flood may have been mild and gentle, geologically impotent, leaving no physical evidence that it ever happened.

Even on the basis of uniformitarian considerations (the relatively small local floods of the present are often tremendously destructive, leaving great gullies and thick deposits of sediment), it should be obvious that a global *kataklusmos*, such as the Bible describes, with its torrents of water from the skies, erupting reservoirs from the depths, universal destruction, violent tidal actions, great winds, rising mountains, and sinking basins, and other non-tranquil phenomena must surely have accomplished far more geological disruption than a great number of local floods could ever do.

How it is that the usual slow, uniform processes of nature could leave permanent records in the form of great sedimentary strata and fossil graveyards all over the world and through all the ages, while a uniquely powerful worldwide hydrodynamic convulsion — which destroyed all living land animals and the earth itself — would leave no discernible effects whatever, poses a unique geological conundrum. *The idea of a worldwide, year-long “tranquil” flood is hydrologically and geophysically absurd, about like a tranquil worldwide explosion!*

Gaps in Human Chronology

A somewhat different objection to the Flood comes from archaeology instead of geology, and has to do with the date of the Flood.

The dating methods used by archaeologists and anthropologists for dating ancient human sites and cultures (e.g., radiocarbon, pottery dating) yield a chronology far longer than the Bible seems to allow for the post-Flood era. The histories of Egypt, Sumeria, and other ancient nations, as well as the more equivocal cultures of Neanderthal and Cro-Magnon settlements, have all certainly taken place after the Flood and after the dispersion from Babel, if the Bible record is true. Yet the Bible, at least as we have it in the King James Version, does not seem to allow enough time for all these developments.

Accordingly, Christian scholars have suggested ways of accommodating Genesis to archaeology, as well as to geology. These attempts also,

2 Young, who originally accepted a worldwide, cataclysmic flood as described in the Bible, later taught a worldwide tranquil flood and still later began advocating a local flood. His confidence in biblical authority (except as corrected by “science”) has likewise declined in recent years.

however, like the accommodationist schemes already discussed, actually raise more problems than they solve.

The genealogical lists in Genesis 5 give the age of each man in the line from Adam to Abraham at the birth of the son who is next in the line. When these are added, they give a total of 1,656 years from Adam to the Flood. A similar list for the postdiluvian patriarchs in Genesis 11 gives 368 years from the Flood until Abraham migrated into Canaan. Abraham's time is well within the period of recorded history. Although a number of detailed chronological questions for the post-Abrahamic period are not settled, there is general agreement that Abraham's migration occurred no earlier than 2000 B.C.

Therefore, the date of the creation, as obtained by simple addition of the figures given in the Masoretic text of the Old Testament, was about 2,024 years prior to Abraham's journey from Haran to Canaan, or around 4000 B.C. The date of the Flood on this basis is around 2350 B.C.

Dates such as these are considered by modern anthropologists to be preposterous! These scholars believe man to have been on the earth for at least a million years. The Flood is rejected altogether, except perhaps as an old tradition of a Euphrates flood occurring sometime around 3000 B.C.

The sharp disagreement of the Genesis chronologies of human prehistory with these speculations of evolutionary anthropology and archaeology is a matter of serious concern. This problem has led to various theories about imaginary "pre-Adamite" men, and has been one of the main reasons why so many modern theologians have relegated Genesis 1–11 to the status of mythology, rejecting its historical content altogether.

1. Accuracy of Transmission

For those who take these Genesis chapters historically, there are three possible approaches to consider. First, it may be that the numbers in Genesis 5 and 11 have been corrupted by faulty transmission. The Masoretic text, on which the figures cited above are based, differs from the Septuagint and Samaritan texts. The Samaritan text would add 301 years and the Septuagint 1,466 years to the period calculated above from the creation to Abraham.

This would extend man's creation back to only about 5500 B.C. at most, and this is only a drop in the bucket compared to the million-year demands of evolutionary chronology.

2. Genealogical Gaps

A second approach is to assume that there are certain gaps in the genealogies of Genesis 5 and 11, with the term "begat" implying ancestry,

rather than immediate parental relationship. At least one such gap is specifically suggested by the genealogy in Luke 3, which inserts the name Cainan between Arphaxad and Salah. This name is actually found in the Septuagint translation of Genesis 5, with an additional increment of 130 years. Also a gap is perhaps implied at the time of Peleg (Gen. 10:25 and 11:18). The life spans of Peleg's ancestors were as follows: Shem, 602; Arphaxad, 438; Salah, 433; and Eber, 464. Peleg himself lived only 239 years. His immediate descendants were Reu, 239; Serug, 230; Nahor, 148; and Terah, 275. There is thus a sharp decline in longevity between the time of Eber and Peleg, and this may well be because an unknown number of intervening generations have been omitted. On the other hand, it was in the days of Peleg that the earth "was divided," and this division, whatever it was, may itself have suddenly decreased man's longevity.

This "genealogical-gap theory" is biblically permissible if kept within reasonable bounds. There are several other instances in Scripture where similar gaps can be found (e.g., Matt. 1). Therefore, the Flood may possibly be dated considerably earlier than the previously calculated 2350 B.C., and the creation considerably earlier than 4000 B.C. If such gaps are allowed, however, there seems no exact way of determining these dates from biblical considerations alone.

In any case, this device still does not correlate the biblical chronology with the standard evolutionary chronology of human history. There are 20 names in the patriarchal list from Adam to Abraham, with the total time indicated as about 2,000 years. To correlate this with the evolutionists' chronology of approximately 1,000,000 years of human history requires an average "gap" between each adjacent pair of names in the genealogical lists of almost 50,000 years! This is obviously absurd, and makes Genesis 5 and 11 look ridiculous. One would have to read Genesis 5:6, for example, in some such fashion as this: "Seth lived an hundred and five years, and begat (a son whose remote descendant, 50,000 years in the future, would be) Enos." The same flexibility would have to be assumed for all other links in the chain.

Actually only 15 possible gaps exist, since the connection of Seth to Adam, Noah to Lamech and to Shem, Shem to Arphaxad, and Terah to Abraham, are spelled out in such a way as to preclude the possibility of intervening generations in those cases. Furthermore, Jude 14 agrees with Genesis 5 that Enoch was the "seventh from Adam," so this eliminates five more possible gaps. Thus, the average gap really has to be 100,000 years! Since all known and recorded human history extends back only about

4,000 years, the average gap in every case must be about 25 times longer in duration than all known history!

Preservation of the patriarchal names and ages and historical events by any kind of tradition over such long ages is a patent impossibility. They could have been given only by direct dictation to Moses from God if meaningful and accurate information of this kind were to be conveyed for inscripturation in God's Word. That being so, there is no reason that the names of Cainan, Mahalaleel, Serug, *et al*, were included in the list at all. No other information is given concerning them, and the 20,000 or so names that were presumably omitted from the lists would have been just as vital in transmitting the patriarchal seed as these.

Lamech, the father of Noah, was still keenly aware of the terms of God's Edenic curse (Gen. 5:29), which would be highly unlikely if the curse has been pronounced half a million years before his time. And Job, who lived in the early centuries after the Flood and long before the Book of Genesis had been compiled by Moses, was well aware of Adam and the events of patriarchal history, as we have already seen.

Furthermore, it is significant that the same genealogical lists of Genesis 5 and 11 are repeated in 1 Chronicles 1:1–4, 24–27 and Luke 3:34–38, with no indication that either the ancient Jewish historians or the early Christians had any inkling that these lists were so fantastically fragmentary.

It must be concluded, therefore, that the biblical record cannot be harmonized *at all* with the standard evolutionary reconstruction of human history as promoted by modern anthropologists and archaeologists. In the absence of actual *proof* to the contrary, the dates of creation and the Flood are quite reasonably placed in terms of the past several thousand years.

Chapter 5

The Age of the Earth

It has been shown that neither the day-age theory, nor the gap theory, nor any other accommodationist theory can be applied legitimately to the creation record to allow for the supposed great ages of geology. The same is true for the vast span of cosmic time demanded by astronomers to accommodate their big bang and the subsequent eons of assumed stellar and galactic evolution. Whether we like it or not, the inspired record of Genesis has told us plainly (as God later re-emphasized on Mount Sinai) “In six days the Lord made heaven and earth, the sea, and all that in them is, and rested the seventh day” (Exod. 20:11). If the Bible is truly the infallible and inerrant Word of God, as the Lord Jesus believed and taught (“the Scripture *cannot be* broken,” He said, for example in John 10:35), then that should settle the question. At least it should settle it for those who claim to believe in the inerrancy and authority of the Holy Scriptures.

There may be scientific questions related to the concept of recent creation, and these are discussed in Volume 2 of this Trilogy. There, the real hard data of science are shown to be in full harmony with both recent creation and a worldwide flood. Even if there still remain some unresolved scientific problems, however, these can never invalidate the plainly revealed Word of the eternal living God. He was there, and the scientists who reject His Word were *not* there. Furthermore, He cannot lie, whereas even the greatest scientists are fallible, sinful human beings, like everyone else. They can, and do, make many mistakes, and they have many biases. “Let God be true, but every man a liar!” the Scripture enjoins (Rom. 3:4).

Because this doctrine of recent creation and the global cataclysmic flood seems to be the chief point of attack by unbelievers and the chief

stumbling block for believers, we want to emphasize it further in this chapter. Even if one could manage to re-interpret the plain words of Scripture to allow the multi-billion years demanded by evolutionists, there are many other theological, moral, and philosophical reasons for rejecting these great ages. There are also many good scientific evidences for a young earth as well, but these are discussed in Volume 2.

Why Recent Creation Is a Vital Doctrine

The one aspect of strict creationism that is under greater attack by evolutionists than any other is the biblical doctrine of recent creation in six literal days, which then implies also the worldwide Flood. The evolutionist, realizing the weakness of the scientific case for evolution when he really tries to defend it, will almost always direct his main arguments not against creation *per se*, but against *recent* creation and its corollary, flood geology.

As a result, some people who consider themselves creationists have been so intimidated by this biblical concept that they try to cling to the 19th-century evolutionary compromise now known as the “day-age theory” and “progressive creation.” Some still rely on the “gap theory,” hoping they can ignore the problem by pigeon-holing the evolutionary ages of the geologists in an imaginary gap between the first two verses of Genesis. These theories attempt to accommodate the geological ages, even though it is the geological ages that provide the main basis and framework for evolution. “Young earth creationists” embarrass both the progressive creationists and the gap creationists, so they complain that recent creation is merely an optional interpretation that is unimportant and expendable.

But this cannot be. As a strictly scientific question, divorced from any biblical or theological considerations (as presumably, in a public school textbook or in a scientific debate), the *date* of creation can and perhaps should be treated as a separate topic from the *fact* of creation. This does not make it expendable, however. It is an important and basic issue that deserves serious study in its own right, strictly in terms of the relevant scientific data. When the biblical and theological data are also considered (as in a church or other Christian context), the doctrine of recent creation becomes critically significant, integrally interwoven with the doctrine of creation itself. Outlined below, very briefly, are a few of the reasons why the doctrine of recent creation is vitally important to true biblical Christianity.

1. Historical Reasons

“Progressive creationism” is not a modern interpretation developed to bring the Genesis record into harmony with modern science, but a very

ancient concept devised to impose a theistic meaning upon the almost universal pagan evolutionary philosophies of antiquity. The eternal pre-existence of the physical universe of space and time, with “matter” also present in some form, was a belief shared by all ancient religions and philosophies, seeking as they were to function without an omnipotent, holy, eternal, personal, creator God. Sad to say, compromising monotheists, both in ancient Israel and in the early Christian church, repeatedly resorted to various allegorical interpretations of Scripture, involving some form of long-stretched-out creation, seeking to combine creationist/redemptionist theology with pagan humanistic philosophy. Almost inevitably, however, such compromises ended in complete apostasy on the part of the compromisers.

In modern times, Charles Darwin himself is a classic case in point. Starting out as a biblical creationist, his decline began with his acceptance of Lyellian uniformitarianism, the geological ages, and progressive creationism. He then soon became a full-fledged theistic evolutionist, and eventually an atheist. The same steps were traveled by many other scientists of that period. In fact, science itself was originally (in the days of Newton and the other founders of modern science) committed to the strict biblical chronology, then drifted into progressive creationism (after Georges Cuvier, Charles Lyell, and others), then into a Darwinian theistic evolutionism, and finally into total evolutionary naturalism.

The creationist revival of the first quarter of the 20th century was short-lived because it again tried to compromise with the day-age theory. This was William Jennings Bryan’s fatal mistake at the Scopes trial. The various early creationist organizations also failed to take a firm position on recent creationism and soon either died out (e.g. The Religion and Science Association, which lasted just two years, and the Creation-Deluge Society, which survived for six years), or became almost impotent (as in the case of the original Evolution Protest movement), or capitulated to theistic evolutionism (for example, the American Scientific Affiliation). Multitudes of churches, schools, and other Christian organizations have followed the same dead-end path of compromise during the past century. For a fuller account, see *History of Modern Creationism*¹.

2. Theological Reasons

Even if one does not accept the Bible as the inerrant and authoritative Word of God, the concept of a personal, omnipotent, omniscient,

1 Henry M. Morris, *History of Modern Creationism* (Green Forest, AR: Master Books, 1993).

loving God is fatally flawed by the old-earth dogma. The very reason for postulating an ancient cosmos is to escape from God, to push Him as far away in space and as far back in time as possible, hoping thereby eventually to escape His control altogether by letting “nature” become “god.”

Surely an omniscient God could devise a better process of creation than the random, wasteful, inefficient trial-and-error charade of the so-called geological ages, and certainly a loving, merciful God would never be guilty of a creative process that would involve the suffering and death of multitudes of innocent animals in the process of arriving at man millions of years later.

It should be obvious that the God of the Bible would create everything complete and good, right from the start. In fact, He testified that all of it was “very good” (Gen. 1:31). The wastefulness and randomness and cruelty that is now so evident in the world (both in the groaning creation of the present and in the fossilized world of the past) must represent an *intrusion* into His creation, not a mechanism for its accomplishment. God would never do a thing like that, except in judgment on sin!

Furthermore, if one must make a choice between a full-fledged theistic evolutionism and a compromising “progressive creationism,” with its “day-age” theory of Genesis, one would have to judge the latter worse than the former, theologically speaking. Both systems are equally objectionable in terms of their common commitment to the geological-age system, with its supposed three-billion-year spectacle of random wastefulness and a suffering, dying world. However, progressive creationism compounds the offense by making God have to redirect and recharge everything at intervals.

Theistic evolutionism at least assumes a God able to plan and energize the total “creation” process right at the start. Progressive creationism imagines a world that has to be pumped up with new spurts of creative energy and guidance whenever the previous injection runs down or misdirects. Surely all those who *really* believe in the God of the Bible should see that *any* compromise with the geologic-age system is theological chaos.

Whether the compromise involves the day-age theory or the gap theory, the very concept of the geological ages implies divine confusion and cruelty, and the God of the Bible could never have been involved in such a thing as that at all.

3. Biblical Reasons

As far as the biblical record itself is concerned, there is not the slightest indication anywhere in Scripture² that the earth endured long ages before the creation of Adam and Eve. The Lord Jesus Christ himself said: “But from the beginning of the creation God made them male and female” (Mark 10:6).

The crystal-clear statement of the Lord in the Ten Commandments also completely precludes the day-age interpretation of the six days of creation:

Remember the Sabbath day, to keep it holy. Six days shalt thou labor, and do all thy work: But the seventh day is the Sabbath of the Lord thy God: in it thou shalt not do any work . . . for in six days the Lord made heaven and earth, the sea, and all that in them is, and rested the seventh day: wherefore the Lord blessed the Sabbath day, and hallowed it (Exod. 20:8–11).

If God’s six work days were not the same kind of days as the six days of man’s work week, then God is not able to say what He means! The language could hardly be more unambiguous and explicit. Note also this further confirmation later in the same Book of Exodus:

[The Sabbath] is a sign between me and the children of Israel forever: for in six days the Lord made heaven and earth, and on the seventh day he rested, and was refreshed. And he gave unto Moses, when he had made an end of communing with him upon Mount Sinai, two tables of testimony, tables of stone, written with the finger of God (Exod. 31:17–18).

All Scripture is divinely inspired, but this portion was also divinely *inscribed*!

Still further, the record of the six days of creation concludes with the statement by God that everything in His creation was “very good” at the end of the six days (Gen. 1:31). There is no way that this could be harmonized with a worldwide fossil graveyard a mile deep all around the earth. The Bible makes it plain, in fact, that death never even entered the world until Adam sinned (Rom. 5:12; 1 Cor. 15:21) and brought God’s curse on the ground (Gen. 3:17; Rom. 8:20–22). The Bible says that death is “the wages of sin,” and that “Christ died for us” (Rom. 6:23; 5:8).

2 See Henry Morris’s book *Biblical Creationism* (Grand Rapids, MI: Baker Book House, 1993, 276 p.), in which every passage in the Bible dealing with creation and primeval history is carefully examined. The uniform teaching of the whole Bible is that of a recent, supernatural, completed creation of all things.

The entire biblical doctrine of substitution and blood redemption becomes meaningless if death and bloodshed reigned in the world for ages before sin came into the world.

4. Scientific Reasons

Those who insist on accommodating the geological ages, despite all the biblical, theological, and historical arguments against them, do so on the grounds that “science” requires it. “God would not deceive us,” they say, “by making the earth look so old, if it were really young.”

But it is, in fact, the other way around. If the earth were really old, God would not deceive us by saying so clearly and emphatically in His inspired Word that He created it all in six days.

For that matter, the earth does not really look old anyway. Evolutionists have tried to *make* it look old by imposing the unscriptural³ and unscientific dogma of uniformitarianism (“present processes are sufficient to explain all past geological formations”) on the geological record of earth history as preserved in the rocks of the earth’s crust. The fact is that geologists are today finally abandoning their outmoded 19th century uniformitarianism, realizing that catastrophism (“past formations produced by intense convulsive processes”) provides the only realistic explanation for the great geological structures on the earth. Even though they are still unwilling to acknowledge the validity of flood geology as based on the Bible, they do recognize now that the earth’s various geological features were each formed rapidly, in intense catastrophes of one kind or another.

Furthermore, there are many times more geological processes and systems⁴ that imply a young age for the earth than the handful of radiometric methods that can be forced (through an extreme application of uniformitarianism) to yield an old age. This perversely continued insistence on an ancient earth is simply because of the philosophical necessity to justify evolution and the pantheistic religion of eternal matter, while rejecting the Triune God.

If it were not for the continued apathetic and compromising attitude of liberal and neo-evangelical Christian theologians and other intellectuals on this vital doctrine of recent creation, evolutionary humanism would long ago have been exposed and defeated. The world will never take the biblical doctrine of the divine control and imminent consummation of all

3 See 2 Peter 3:3–6, where uniformitarianism in studying origins and earth history is called “wilful ignorance.”

4 See *What Is Creation Science?* by Henry M. Morris and Gary E. Parker (Green Forest, AR: Master Books, 1987), p. 285–293, for a listing of over 60 such processes.

things very seriously until we Christians ourselves take the biblical doctrine of the recent creation of all things seriously. Neither in space nor in time is our great God of creation and consummation “very far from every one of us” (Acts 17:27).

The Testimony of Christ and the Apostles

Christians who go along with the standard “old-earth” model of the evolutionists must realize that they are going against the strong testimony of the Lord Jesus Christ, for He clearly affirmed the truth of recent creation. Jesus Christ was the Creator of all things (note John 1:1–3, 10; Col. 1:16; Eph. 3:9; Heb. 1:2, 10; etc.) and so knows far more about *when* He created the world than all the modern evolutionary geologists and big-bang astronomers combined. Christ says that there have been people on the earth since the very beginning of the world — and He ought to know, for He was there!

For example, when the Pharisees asked Him about marriage and divorce, He replied that “from the beginning of the creation God made them male and female” (Mark 10:6). He did *not* say that God made the first man and woman *15 billion years after* the beginning of the creation, but right *from* the beginning of the creation. In fact, the whole creation had been prepared for them — even the stars had been made to serve mankind “for signs, and for seasons” Gen. 1:14, 16), and they were given “dominion . . . over all the earth” (Gen. 1:26). Such a stewardship responsibility would be an anachronism if animals and plants had already been living and dying — many even becoming extinct — for long ages before they were placed under some kind of human “dominion” (note also Heb. 2:6–8).

Soon after this primeval dominion mandate, sin and death entered the world through man’s disobedience, and God had to begin His work of redemption. His divine Lamb “was foreordained before the foundation of the world” and thereby became “the Lamb slain from the foundation of the world,” with the names of those who would be redeemed “written in the book of life from the foundation of the world” (1 Pet. 1:20; Rev. 13:8; 17:8). What conceivable purpose could God have had in interposing a billion years of suffering and death in the animal kingdom prior to implementing His great plan of salvation for lost men and women? Our Lord is neither cruel nor capricious, and He would never be guilty of such pointless sadism. A further question is why so many evangelical Christians seem eager to advocate such an unworthy and demeaning compromise!

Beginning with Abel (the first prophet of God according to Jesus in Luke 11:51), God sent prophet after prophet to transmit His Word to men. More often than not their message was opposed, even to the point

of bloodshed, and this persecution also has been going on from the beginning. Jesus himself referred to “the blood of all the prophets, which was shed from the foundation of the world” (Luke 11:50). That is, God’s prophets have been preaching and dying since the very foundation of the world — not starting five billion years later.

This opposition to God’s plan has been instigated by Satan himself. Jesus called Satan “a liar, and the father of it,” as well as “a murderer from the beginning” (John 8:44). He had not only deceived Eve with his humanistic philosophy: “Ye shall be as gods” (Gen. 3:5), but also he had caused Cain to murder God’s first prophet, his brother Abel. This, too, was at “the beginning,” not five billion years *after* the beginning, for even if animals had been dying for a billion years before this, as theistic evolutionists assert, their deaths could not be called “murders.” Note also 1 John 3:8: “The devil sinneth from the beginning.”

There is yet coming a time of God’s great wrath on this unbelieving world. Again it was Jesus who said: “In those days shall be affliction, such as was not since the beginning of the creation which God created unto this time” (Mark 13:19). The clear premise of this prophecy by Christ was that there had, indeed, been tribulation and affliction “since the beginning of the creation which God created” (and, therefore, people had been on the earth all during that time), but that the coming period of “great tribulation” would be still worse.

Also note that, according to these words of Christ, the creation had both a “beginning” and would have a termination (“created” is in the past tense, in consistency with the use of this word all through the Bible). The world and its inhabitants are *not* continuously *being* created, as evolutionists and many progressive creationists would have us believe, for the creation was a completed event in the past. See also Hebrews 4:3 for a clear affirmation that all God’s “works were finished from the foundation of the world.”

Thus, the Lord Jesus Christ, by whom all things were created in the beginning, has repeatedly made it clear that the supposed billions of years of a groaning, travailing creation (note Rom. 8:22) prior to man’s creation and fall never existed at all. God created men and women at the beginning, and then, when Adam sinned, He quickly began to implement His great plan of redemption. To the redeemed He has promised “a kingdom prepared for you from the foundation of the world” (Matt. 25:34), without the slightest intimation that there would be a 15-billion-year prelude before He would even start His program of redemption.

The same emphasis was later carried forward by His apostles. Peter, for example, promised the imminent return of Christ, “whom the heaven

must receive until the times of restitution of all things, which God hath spoken by the mouth of all His holy prophets since the world began” (Acts 3:21).

Similarly, at the birth of John the Baptist, the prophet/priest Zechariah emphasized that God’s “horn of salvation” was coming, “as he spake by the mouth of his holy prophets, which have been since the world began” (Luke 1:69–70). Thus, just before and just after Christ’s earthly ministry, we are assured that Jesus spoke clearly and truly when He said that God’s prophets have been transmitting God’s Word to man not just since human history began, but “since the world began.” Therefore, the world and its human inhabitants began at essentially the same time.

Consider also this testimony of the apostle Paul: “For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead; so that they are without excuse” (Rom. 1:20). This powerful verse explicitly tells us that the evidences of God can be seen so clearly in His created world that it is inexcusable for people not to see them. Furthermore, these evidences were being seen and understood by *people*, not just since a certain imaginary population of evolving hominids somehow acquired souls, but “from the creation of the world.”

Lest anyone equivocate over the meaning of “world,” note that two different Greek words have been translated as “world” in the passages cited above. In Matthew 13:35, 25:34; Luke 11:50; Hebrews 1:10, 4:3; 1 Peter 1:20; Revelation 13:8, 17:8; and Romans 1:20, the Greek word is *kosmos*. In Matthew 24:21 and Acts 3:21, the word is *aion*. As defined in Strong’s *Greek Dictionary of the New Testament*, *kosmos* means an “orderly arrangement” (that is, a cosmos instead of a chaos), referring in biblical context to the fact that the heavens, the earth, life, man, and man’s systems had been divinely designed and arranged, *not* randomly produced by chance processes.

Aion is defined as “age,” and also as “world,” thus carrying the concept of both time and matter. In modern terminology it suggests the space-time-matter “continuum” that constitutes our physical universe. Therefore, whether the “world” in these texts is considered as the universe of space, time, and matter, or as the orderly structure of all its components, it does not make any difference as far as the *time* of creation is concerned. People have been a part of the created world since both the beginning of time and the foundation of the world.

This, of course, is also the teaching of all Old Testament passages dealing with this subject, as well as of many other New Testament verses.

In Henry Morris's book *Biblical Creationism*, every passage in the Bible dealing in any way with the subject of creation is analyzed, with the conclusion that the unequivocal teaching of the whole Bible is *recent creation* of all things. There is no hint of long geological or astronomical ages before man anywhere in the Bible.

Why, then, do so many Christians insist that we should believe in these long ages, pushing our Creator as far out in space and as far back in time as we possibly can? The apparent reason is that they feel it is more important to be "scientific" (as currently defined) than biblical (as eternally defined, Ps. 119:89). The statement of Dr. Pattle P. T. Pun, professor of biology at Wheaton College, is typical.

It is apparent that the most straightforward understanding of the Genesis record, *without regard to all the hermeneutical considerations suggested by science* [emphasis mine] is that God created heaven and earth in six solar days. . . . However, the recent creationist position . . . has denied and belittled the vast amount of scientific evidence amassed to support the theory of natural selection and the antiquity of the earth.⁵

Although Dr. Pun is reputedly a sincere and gracious Christian, he feels, nevertheless, that we must base our biblical hermeneutics on "science," and the same is apparently true of most of his colleagues at Wheaton College and in the American Scientific Affiliation, as well as of numerous leading theologians, scientists, and educators throughout the evangelical world.

Although ICR scientists (with academic qualifications at least equal to those of Dr. Pun and his colleagues), as well as large numbers of other creationist scientists in many fields, hold the greatest respect for true science (i.e., *knowledge*, not naturalistic extrapolation), we believe that the clear teachings of Jesus Christ — as well as of God's Word in general — must be given higher priority. His approval has far greater value in the light of eternity than that of our professional peers, and *He* taught that the world is young.

⁵ *Journal of the American Scientific Affiliation*, March 1987, p. 14.

Chapter 6

Supposed Biblical Difficulties with Recent Creationism

Most of the objections that have been lodged against the biblical doctrines of the young earth and Flood geology are scientific in nature. These are beyond the scope of this book, but are discussed and refuted in Volume 2 of this Trilogy on creation.

In the meantime, when scientific objections to literal creationism are raised, it is always helpful to keep one important fact in mind, a fact that will keep this whole issue in clear perspective. That is, there are no *written* records of any historical events prior to about 2500 B.C. Everything beyond that is *speculation*. In fact, the historical chronology that extends back the farthest is in the Bible itself! Even allowing for possible uncertainties in the biblical manuscripts and possible gaps in the genealogical lists in the Bible, the Genesis records cannot feasibly be stretched back to more than, say, about 10,000 B.C. at most.

The traditional Ussher date of 4004 B.C. for creation week actually fits the biblical data better, although the evidence is sufficiently ambiguous to permit many other dates to be suggested by various scholars all working with the same biblical premises as Ussher (about 300 different dates have been published at one time or another, all of them, nevertheless, agreeing that the creation took place only several thousand years ago).

The Calculations of Bishop Ussher

It is important to remember that the widely ridiculed Archbishop James Ussher was not a Bible-thumping backwoods preacher, but

rather a scholar of great ability. His calculations on chronology incorporated all the biblical and extra-biblical historical data known in the 17th century. His greatest work on this subject, proposing 4004 B.C. as the beginning of history, was published in 1654, not long before his death in 1656.

The noted archaeologist and historian Colin Renfrew, recognized as one of the world's leading students of ancient history, has commented on this subject as follows:

Nor was this belief restricted to the credulous or the excessively devout. No less a thinker than Sir Isaac Newton accepted it implicitly, and in his detailed study of the whole question of dating, *The Chronology of Ancient Kingdoms Amended*, took the ancient Egyptians severely to task, since they had set the origins of the monarchy before 5000 BC . . . and "out of vanity have made this monarchy some thousands of years older than the world." This criticism was meant literally; for an educated man in the seventeenth or even eighteenth century, any suggestion that the human past extended back further than 6,000 years was a vain and foolish speculation.¹

Isaac Newton, of course, who lived in the generation following that of Ussher, was one of the greatest scientists of all time, and he was familiar with the ancient pagan speculations concerning the evolution and great antiquity of the world, but he rejected all that in favor of what was, in his day, the scientific view that the world was young. He was thus not only a convinced scientific creationist, but also a believer in recent creation.

It is interesting that one of the leading evolutionists of our own day, Stephen Jay Gould, has also recognized the scholarly stature of Bishop Ussher.

Ussher represented the best of scholarship in his time. He was part of a substantial research tradition, a large community of intellectuals working toward a common goal under an accepted methodology.²

1 Colin Renfrew, *Before Civilization* (New York, NY: Alfred A. Knopf Publ., 1973), p. 21.

2 Stephen Jay Gould. "Fall in the House of Ussher," *Natural History* (Nov. 1991), p. 16.

In thus defending Ussher, Gould particularly was referring to an important article³ by another modern writer, the well-known Old Testament scholar, James Barr. Barr, like Gould, is a liberal and an evolutionist, rejecting the concept of biblical inerrancy and divine authority. Nevertheless, he has pointed out that all Old Testament Hebrew authorities, liberal or otherwise, acknowledge that the intent of the biblical writers was to teach a literal six-day creation and a worldwide flood (even though he himself doesn't believe in them!).

Then Gould makes the following important point, showing why Ussher's work, regardless of its scholarship, was rejected:

Today we rightly reject a cardinal premise of that methodology — belief in biblical inerrancy — and we recognize that this false assumption allowed such a great error in estimating the age of the earth.⁴

This is the real reason that people today reject the biblical date for the age of the earth. The Bible clearly and unequivocally teaches a recent creation, but men no longer believe the Bible. They have rejected the infallible Word of the eternal Creator God in favor of the opinions of fallible scientists who insist that “we will not have this man to reign over us” (Luke 19:14). Why, then, do so many Christians who say they *do* believe in biblical inerrancy and authority also reject the plain statements of Scripture in favor of the opinions of Christ-rejecting unbelievers? Is it because “they loved the praise of men more than the praise of God” (John 12:43)?

In any case, they have labored hard to find some *biblical* justification for rejecting the biblical record of recent creation, and we do need to look at a few of these attempts.

Adam and the Animals

Several objections that have been raised deal with the relation between the “two accounts” of creation — that is, the supposed discrepancies between Genesis 1 and Genesis 2 — and the relations there stipulated between man and the animals.

When God created the first man and woman, He told them to exercise “dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth” (Gen. 1:28). This

3 James Barr. “Why the World was Created in 4004 BC: Archbishop Ussher and Biblical Chronology,” *Bulletin of the John Rylands University Library of Manchester* (Volume 67), pp. 575–608.

4 Gould, “Fall in the House of Ussher,” p. 16.

divinely endowed stewardship of mankind over the animal kingdom, under its Creator, involves many responsibilities, and it has never been withdrawn.

Before discussing this stewardship, however, we must answer two other objections that have been lodged against the biblical account of the animal creation and its relation to mankind. The first is the charge of skeptics that the two accounts of creation (Gen. 1 and 2) contradict each other, the main “proof” of this charge being the implication in Genesis 2 that Adam was created *before* the animals, whereas the order of events in Genesis 1 clearly indicates that Adam and Eve were created on the sixth day, *after* all the animals had been created. The controversial passage reads as follows:

And out of the ground the Lord God formed every beast of the field, and every fowl of the air; and brought them to Adam to see what he would call them: And whatsoever Adam called every living creature, that was the name thereof (Gen. 2:19).

If there were a real contradiction here as to when the animals were created, it is strange that their Creator, the Lord Jesus Christ, seemed unaware of it! In answering a question about the permanence of marriage, He quoted from both Genesis 1 and 2 together, with no intimation that the accounts were not perfectly complementary.

He which made them at the beginning made them male and female [quoting Gen. 1:27], and said, For this cause shall a man leave father and mother, and shall cleave to his wife: And they twain shall be one flesh [quoting Gen. 2:24] (Matt. 19:4–5).

In the more detailed account of the forming of man and woman in Genesis 2, there was no need to mention the animals at all until they were brought before Adam to be “introduced” to him, as it were, and then named by him. The superficial and apparent contradiction is removed simply by noting that there is no distinction in Hebrew between the past tense and the past perfect or pluperfect tense, the context determining which to use. By replacing the past tense (“formed”) by the pluperfect (“had formed”) in Genesis 2:19, one would read the verse as follows: “And out of the ground the Lord God had formed every beast of the field.”

Some commentators have argued against this translation, but its legitimacy is verified by Dr. H. C. Leupold, professor of Old Testament

Exegesis at the Capital University Seminary (Lutheran) in Columbus, Ohio, in his masterful two-volume commentary on Genesis.

It would not, in our estimation, be wrong to translate *yatsar* as a pluperfect in this instance: “He had molded.” The insistence of the critics upon a plain past is partly the result of the attempt to make chapters one and two clash at as many points as possible.⁵

The two accounts, therefore, are complementary, not contradictory!

But then, say the skeptics, it is absurd to think that Adam could name all the animals in part of a single day. This argument is also used by those Christians and Jews who believe the Bible in a general way, but who insist that “science” requires us to believe that the days of creation week were long ages instead of literal days.

It cannot be “absurd,” however, since God has made it quite plain that the “days” *were* literal days (note, especially, Gen. 1:5 and Exod. 20:8–11). This particular criticism ignores two very important facts: (1) Adam was much more intelligent than we can even imagine today; and (2) He did not have to name every species of animal, but only the distinct “kinds” of animals that were of immediate interest and access in his daily activities.

Adam had been created in the very “image” of the omniscient God, and that image had not yet been damaged by sin and the curse. Scientists today recognize that modern man actually uses only a very small part of his brain’s potential, but Adam, with his mental capacity just then created by a purposeful, wise, loving Creator, perhaps could have used it all! He could surely have recognized, almost instantly, the distinctive qualities of each pair of animals as the different kinds passed before him, and then given them appropriate names. For that matter, just as God had created Adam as an already grown man, so He also could have created in Adam’s brain an instinctive and instantaneous awareness of the many different animal kinds.

And Adam gave names to all cattle, and to the fowl of the air, and to every beast of the field; but for Adam there was not found an help meet for him (Gen. 2:20).

Note that the animals herein named included only the cattle, the birds, and the field animals. *Not* included were the “beasts of the earth,”

5 H. C. Leupold, *Exposition of Genesis*, Volume 1 (Grand Rapids, MI: Baker Book House, 1950), p. 130.

the “creeping things” and the “fish of the sea” (Gen. 1:24, 26). Thus, the vast multitudes of marine animals and insects, as well as reptiles and amphibians, were excluded. The cattle evidently were the domesticable animals (horses, sheep, cows, etc.), and the “beasts of the field” were animals that would live in the wild in the Garden of Eden and its nearby fields. The “beasts of the earth” were presumably to live throughout the earth and would have only infrequent contact with man, so they were not among those to be viewed by Adam at this time. Nor were the “creeping things,” those animals built low to the ground, which, while necessary to a functioning ecology, were not of direct, personal importance to human life.

In the context, the purpose of this assignment to Adam by God was both to acquaint him with the animals likely to be associated directly with his normal activities, and also to show him that, while he was to have dominion over them, none were qualified to be a “helper like him.” Only a woman, also made in God’s image, could qualify for this role.

Furthermore, Adam did not have to name all the *species* of even this limited number of animals, but only the *kinds* — which is a much broader term, possibly comparable, in many cases, to our modern taxonomic “family” (for example, there are some 600 “species” of hummingbird, with only slight differences in that “family”). Although we may not be able to determine the actual number of animals involved, it was *not* inordinately large, and Adam, with his vast innate mental abilities, still unimpaired by sin, could surely have named them all in a reasonable part of one day’s time.

Creation and Ecology

It is often charged that the “dominion mandate” given by God to mankind over the animal and plant kingdoms and over the earth as a whole implies man’s right to plunder the earth. Typical of this unwarranted conclusion is that expressed by Prince Charles of England.

The Prince says that one of the underlying reasons why Western man has dominated nature, rather than lived in harmony with it, can be found in Genesis 1, which records that: “God said unto man, Be fruitful and multiply and replenish the earth and subdue it: and have dominion over the fish of the sea and over the fowl of the air and over every living thing that moveth upon the earth.” The prince argues that this passage, accompanied by our Judaeo-Christian heritage, has given us an “overbearing attitude towards God’s creation.”

This, he says, has contributed to “a feeling that the world is somehow entirely man’s to dispose of” — as income, rather than a capital asset which needs husbanding. “By contrast,” adds the prince, “the Koran specifically mentions the fact that the natural world is loaned from God.”⁶

Prince Charles has quoted Genesis 1:28 correctly, but he has grossly misapplied it. However, his opinion is, sadly, rather typical of those promoting the so-called environmental movement today. The fact is, however, that evolutionary thinking — pantheistic evolutionism in the ancient world and social Darwinism in the modern world — is the *real cause* of the misuse of the earth’s plant and animal resources! This problem is discussed more fully in Volume 3 of this Trilogy.

As far as animals are concerned, they were indeed placed under man’s dominion, and they have definite purposes in the divine economy, but they are to be used, not mis-used. God does care for each of them, and so should we.

The animals were created for various purposes. Some would serve for transportation (e.g., horses), some for labor (e.g., oxen), some as house pets (e.g., dogs), and for various other uses. We can derive various spiritual lessons and analogies from all of them (note Prov. 30:24–31 and Job 12:7–8). God also foresaw the entrance of sin, of course, and therefore the future use of some animals for clothing (e.g., sheep, for their wool). Eventually, after the great Flood, God even allowed men and women to eat “every moving thing that liveth” as long as it was not “flesh with the life thereof, which is the blood thereof” (Gen. 9:3–4; note also 1 Tim. 4:4).

Initially, however, human beings were to have lived strictly on “every herb bearing seed, which is upon the face of all the earth, and every tree, in which is the fruit of a tree yielding seed,” and land animals were to have lived on “every green herb” (Gen. 1:29–30). Even animals that are now carnivores were originally herbivores (for that matter, they can still survive on a herbivorous diet, if necessary — as can people!). The sharp teeth and other structures that are now used in eating flesh seem to be “horizontal” variants, or mutants, or structures originally used in gnawing bark, tough roots, and the like. It may even be that God performed genetic engineering on the animals to forever remind Adam and Eve of the awful consequences of sin, as suggested also by the introduction of “thorns and thistles” as a part of the curse (Gen. 3:17–18).

⁶ Charles, Prince of Wales, as cited in the Foreword to the book *Save the Earth*. Edited by Jonathan Porritt in England in 1991.

Note that, while people were permitted by God to eat the flesh of animals after the Flood (and thus, by extension, to use them also for clothing or research or other worthwhile purposes in the service of mankind, under God), animals were *not* given permission to kill people (note e.g., Gen. 9:6; Exod. 21:28). Although animals are objects of God's loving concern and care (Job 39; Luke 12:6), they are *not* related to man by evolution, as most present-day animal-rights activists allege. The divine rejection of this age-long heresy of the "great chain of being," of evolutionary continuity with the animals, is perhaps one additional reason that God has made such a clear distinction as this between animals and human beings.

An additional very significant use of certain animals — defined as "clean" animals — was for sacrifice. The shedding of the blood (representing the life) of an animal upon a sacrificial altar, when presented in faith by its owner as a substitute dying for his personal sins, was accepted by God as an "atonement" (that is, as a temporary "covering" until Christ would come as the "Lamb of God to take away the sin of the whole world") for his own soul (see Lev. 17:11).

The efficacy of such atoning sacrifices depended implicitly upon the recognition that death was God's judgment upon sin. The death of any of God's creatures containing the "breath of life" and the "living soul" (Gen. 1:21; 7:22) — and this includes at least all the higher land animals — was therefore not God's natural order in His "very good" original created world (Gen. 1:31). Animal death, as well as human death, entered the world only when man brought sin into the world (Rom. 5:12). This is one very cogent reason that Bible-believing Christians should reject the concept of long geological ages with unnumbered billions of animals (even presumed human-like creatures) suffering and dying in the process of evolution, struggling for their existence and seeking to be among the fittest who would survive. For, if death *preceded* sin, death is then *not* the penalty for sin, and Christ's death paid no penalty for sin and was without purpose.

Now, although man indeed is still to exercise dominion over the animal kingdom, and though he does indeed have the right to use animals for food and other needed purposes, even when it involves their death, God still cares for the animals, and so should we. This is made especially clear in the divine monologue at the climax of the Book of Job, when God — instead of dealing with the mystery of human suffering as debated throughout the preceding chapters of the book by Job and his friends — dealt exclusively with the evidences of His creation and His providential care of all His creatures. He "causeth it to rain on the earth, where no man

is” and “provideth for the raven his food” (Job 38:26, 41). He has “given the horse strength” and enabled the eagle to “make her nest on high” (Job 39:19, 27). Christians have no business participating in animal or nature worship, but, likewise, they have a clear command to wisely use and manage nature and animal kind.

Finally, of the great Kingdom age yet to come, God says:

In that day will I make a covenant for them with the beasts of the field, and with the fowls of heaven, and with the creeping things of the ground: And I will break the bow and the sword and the battle out of the earth, and will make them to lie down safely (Hos. 2:18).

The wolf and the lamb shall feed together, and the lion shall eat straw like the bullock: and dust shall be the serpent’s meat. They shall not hurt nor destroy in all my holy mountain, saith the Lord (Isa. 65:25).

In any case, the biblical dominion mandate, giving man dominion over the animals, is far more of a problem for old-earth creationists than for young-earth creationists. If animals (even modern animals) have been living and dying on the earth for millions of years before man was created, the very concept of human dominion over them becomes essentially trivial, if not ridiculous. What would be the point of man’s exercising stewardship over the animals for a few thousand years when they had gotten along very well without him for a hundred million years!

The Length of the Seventh Day

Many progressive creationists make what they think is a major point against the “literal day” teaching of Genesis 1 by noting that the account of the seventh day does not end with the usual formula (e.g., “the evening and the morning were the sixth day”). This, they argue, shows that the seventh “day” never ended, and has, therefore, been going on for several thousand years, as God continues to “rest” from His work on the first six days. Then they go on to infer that, therefore, the first six days were likewise periods of long duration.

This is specious reasoning. We have already shown in some detail that God has defined each “day” (Hebrew *yom*) of creation week to mean precisely what we mean when we use the word “day” in ordinary conversation (see especially Gen. 1:5 and Exod. 20:8, 11), and this very nebulous argument cannot obviate such normal and unambiguous meanings as God has recorded throughout the Scriptures.

Furthermore, the text clearly says that God “*rested*” (past tense), not “is resting.” The fact that “He rested on the seventh day” (Gen. 2:2) says nothing about what He did or did not do on the eighth day or ninth day. His “seventh-day rest” is mentioned specifically because every seventh day was henceforth to be kept as a memorial of the completion of His work of creating and making all things, not because He is now forever resting.

As a matter of fact, He is *not* resting. As soon as His work of *creation* was complete, He began His work of *conservation*, “upholding all things by the Word of his power” (Heb. 1:3; see also Col. 1:17; 2 Pet. 3:7; etc.). In addition, as soon as sin entered the world and God pronounced His curse on “the whole creation” (Gen. 3:19; Rom. 8:20–22), He also began His wondrous work of redeeming, restoring, and reconciling all things. No wonder the Lord Jesus Christ said: “My father worketh hitherto, and I work” (John 5:17).

There is one other important fallacy in this long-day argument. It contradicts its own premise. In order to put the geological ages of the evolutionist into the six days of creation, the old-earth “creationists” must assume that the seventh day of creation week is still going on. Yet the Bible says that on that day God rested from all His work of creating and making all things. That is, the process of creation and manufacture, which God had used during the six days, is no longer in operation.

The problem, however, is that the very existence of these supposed geological ages is based on the premise of uniformitarianism — that is, that there is full continuity of the natural processes of the present world with those of the prehistoric world and that “creative” (read “evolutionary”) episodes are still occurring. Both the sequences and also the duration of the geological ages are based on uniformitarianism, which is an invalid premise if God is really resting in this age from His processes of creating and making all things during the “six ages” of the creation “week.”

It is one thing simply and honestly to reject the Genesis record as non-historical, as the out-and-out evolutionists do. It is another thing altogether to profess to believe in the divine inspiration and authority of the Bible, and then to so distort its meaning as to make it say something its divine Author was at specific pains *not* to say! The apostle Peter issues a severe warning against those who would “wrest” the Scriptures for their own purposes (2 Pet. 3:16).

Theistic evolutionists and progressive creationists have written book after book attempting to find ways of explaining away the clear teaching of God’s Word that all things were created only several thousand years

ago. This is nothing new; it has been going on for hundreds of years. One can force the Bible to say that black is white and up is down, if he changes the meaning of its words to suit his fancy.

The fact remains that, if the Bible is allowed to speak for itself, it teaches that God made everything in heaven and earth in six solar days several thousand years ago. It would be impossible to say this any more clearly and explicitly, assuming that was the intended meaning, than in the words and sentences actually used. When every passage in the Bible dealing with early earth history is carefully examined, it will be found that the whole Bible, with no exception, teaches this truth. There is no hint anywhere in Scripture of evolution or long ages. Those who teach these ideas read them *into* the Bible, not *in* the Bible.

Chapter 7

The Dangerous Route of Compromise

In preceding chapters we have shown that none of the expedients proposed for accommodating evolution and the geological ages in the Bible will work. All of them dishonor the Scriptures while seeking to satisfy majority scientific opinion, wresting them from their intended meaning in the hope of gaining a more sympathetic hearing for Christianity from the intellectual community.

But such compromises never work. The evolutionists just keep demanding more and more compromises; nothing short of total atheism will ever satisfy them! Furthermore, those Christians and Christian organizations that choose to travel this road are in grave danger, for the compromise mentality is reluctant ever to take a firm stand against the pressures and temptations of the world. The compromise road eventually ends in a precipice. Those who travel this broad highway will end up either in apostasy or oblivion as far as their Christian ministry is concerned.

“How long halt ye between two opinions?” was the challenge of the prophet Elijah to the people of God in his day. “If the Lord be God, follow him: but if Baal, then follow him” (1 Kings 18:21). Jesus said, “No man can serve two masters: for either he will hate the one, and love the other; or else he will hold to the one, and despise the other” (Matt. 6:24). We must follow the lead of Joshua, who commanded God’s people to “choose you this day whom ye will serve . . . as for me and my house, we will serve the Lord” (Josh. 24:15).

In short, Christians ought to decide either to believe God’s Word all the way, or not at all. “I would thou wert cold or hot,” said the Lord Jesus

to the compromising evangelical church at Laodicea, “So then because thou art lukewarm, and neither cold nor hot, I will spue thee out of my mouth” (Rev. 3:15–16).

In this chapter we shall illustrate by example both the futility and the dangers of such compromise.

The Intransigence of Evolutionists

Those who try to accommodate evolution as God’s method of creation or who try to make the days of creation into the ages of geology may succeed in winning followers among professing Christians, but they rarely if ever win over any of the leaders of evolutionary thought. The latter are not interested in compromise, and they distrust those who are. They realize full well that evolution and the geological-age system are thoroughly incompatible with the Christian God of love and mercy, and they have little sympathy for Christians who ignore this obvious truth. For example, not long before his death, the Nobel Prize-winning French biologist Jacques Monod, a thorough-going humanist, said this:

Natural selection is the blindest and most cruel way of evolving new species. . . . I am surprised that a Christian would defend the idea that this is the process which God more or less set up in order to have evolution.¹

Similarly, A. J. Mattell accuses such compromising Christians not just of indifference to animal suffering but of outright dishonesty.

Many Christians have taken the dishonest way of lengthening the days into millions of years, but creationists make it clear that such an approach is nothing but a makeshift that is unacceptable biblically and scientifically.²

Mattell is neither a creationist nor a Christian, but he clearly has more respect for the honesty (if not the beliefs) of strict creationists than for the compromises of theistic evolutionists and progressive creationists.

The familiar Genesis story about Esau selling his birthright for a mess of pottage is mentioned in the New Testament as a warning to professing Christians who are being tempted to compromise in order to gain temporary

1 Jacques Monod, “The Secret of Life,” Interview with Laurie John, Australian Broadcasting Co., June 10, 1976.

2 A. J. Mattell, Jr. “Three Cheers for the Creationists,” *Free Inquiry*, vol. 2 (Spring 1982), p. 17.

favor with the world. Don't be like Esau, the writer says in effect, "who for one morsel of meat sold his birthright" (Heb. 12:16).

This very pertinent warning, however, has been given a novel twist by Michael Ruse, one of the leading anti-creationists of our time, a professor of philosophy and zoology at the University of Guelph, in Ontario. Ruse has devoted much of his time in recent years to defending Darwinism and fighting creationism. He has written books on the subject, participated in creation/evolution debates, and served as a witness for the evolutionists in opposing the proposed creation law in Arkansas.

However, he was brought up in a Quaker family, was familiar with the Scriptures, and has even admitted (to the chagrin of his evolutionary colleagues) that he "likes" creationists personally. He was weaned away from Christianity in college by evolutionary teaching and his unhappiness with the "exclusive" nature of the Christian gospel.

A recent issue of *Zygon*, a journal devoted to discussing the relation between science and religion, was dedicated to him and his writings. In discussing his background, Ruse made the following striking comment:

I am sorry to be so rude about this [not that sorry!], but perhaps my indignation is a good point on which to go out. . . . I really want to believe. I find the goodies offered by Christianity extremely attractive. But I am d — d [again!] if I am going to sell my evolutionary birthright for a mess of religious pottage.³

Despite his undoubted erudition, Professor Ruse — like Esau — has made a very bad bargain. To dismiss the shed blood of the Lord Jesus Christ and the eternal salvation it purchased for all who follow Him as merely a mess of religious pottage, and to cling to such an unproved, unreasonable, impossible system as evolutionism as though it were a precious birthright to be retained at all costs, that is a poor bargain! As Jesus said, "For what is a man profited, if he shall gain the whole world, and lose his own soul?" (Matt. 16:26).

At least Dr. Ruse understands the issue — probably better than most Christians, in fact — and so he cannot plead ignorance when he eventually faces his Creator, as someday he certainly will. He expresses the choice thus:

3 Michael Ruse, "A Few Last Words — Until the Next Time," *Zygon*, vol. 29 (March 1994), p. 79.

Either humankind is in a state of original sin or it is not. If it is, then there was reason for Jesus to die on the cross. If it is not, Calvary has as much relevance as a gladiator's death in the Coliseum.⁴

It is evident that the distinguished professor does clearly understand the importance of the sin question. Death is the penalty for sin and, since all men are sinners, only the substitutionary death of the sinless Son of God can atone for sin and provide salvation.

It was, therefore, necessary for God to become man — for the Creator also to become the Redeemer — in the person of His Son, Jesus Christ. Michael Ruse understands this also:

Either Jesus Christ was the Son of God or He was not. If He was, other religions are false. Missionaries — Jesuits past and Evangelicals at present — are right about this. If He was not, Christianity is a fraud — no salvation, no heaven, no nothing.⁵

Yes, Ruse understands, all right, at least with his mind. But, in his heart, he refuses to believe, because he knows that his precious evolutionary “birthright” logically would have to be renounced, along with all worldly fame.

It is remarkable, on the other hand, that so many professing Christians feel that they can somehow accommodate evolution in their Christian faith, when the evolutionists themselves (at least the leaders, rather than the followers, of evolutionary thought) practically all say it can't be done.

A current leader in the field of evolutionary philosophy, Dr. David Hull, a philosophy professor at Northwestern University, says:

The evolutionary process is rife with happenstance, contingency, incredible waste, death, pain, and horror.⁶

With respect to the character of any “god” who would use evolution as his process of evolution, Hull goes on to observe:

The God implied by evolutionary theory and the data of natural history . . . is not a loving God who cares about his

⁴ Michael Ruse, “A Few Last Words — Until the Next Time,” *Zygon*, vol. 29 (March 1994), p. 78.

⁵ *Ibid.*, p. 79.

⁶ David L. Hull, “The God of the Galapagos,” *Nature*, vol. 352 (August 8, 1992), p. 486.

productions. He is . . . careless, indifferent, almost diabolical. He is certainly not the sort of God to whom anyone would be inclined to pray.⁷

Charles Darwin himself long ago recognized this diabolical character of evolution.

Darwin himself commented most forcefully upon the inefficient and basically unpleasant character of his process, writing to his friend Joseph Hooker in 1856: "What a book a devil's chaplain might write on the clumsy, wasteful, blundering law, and horribly cruel works of nature!"⁸

Why is it so difficult for theistic evolutionists and progressive creationists to see the complete incompatibility of the idea of a billion years of suffering and death among billions of animals (including presumed pre-Adamite "men"), as supposedly documented in the fossil record of the evolutionary ages of geology, with the biblical revelation of an omniscient, loving Creator?

It is not because the scientific evidence *requires* them to believe in these long ages of evolution. Even Darwin's real reason for developing his theory of evolution was not to explain the scientific evidence, but rather to get away from the Christian idea of God, the God of the Bible.

Although he originally studied to be an Anglican clergyman, Darwin began to have serious doubts about Christianity long before he wrote *The Origin of Species*. Here is his testimony.

Thus disbelief crept over me at a very slow rate, but was at last complete. . . . I can indeed hardly see how anyone could wish Christianity to be true, for if so . . . my father, brother, and almost all my best friends, will be everlastingly punished. And this is a damnable doctrine.⁹

And so Darwin traded his birthright, what he called the "damnable doctrine" of the saving grace of Christ, for the pottage of what he called "the horribly cruel works of nature." This was not because of his science, but because of his deliberate and arbitrary rejection of God's Word.

7 Ibid.

8 Stephen Jay Gould, "Darwin and Paley Meet the Invisible Hand," *Natural History* (November 1990), p. 12.

9 Charles Darwin, "Autobiography," reprinted in *The Voyage of Charles Darwin*, ed. Christopher Rawlings, 1978, *New Scientist*, vol. 104 (December 1984), p. 75.

The same seems to be true of Michael Ruse. His low view of Christianity is set forth in the following diatribe.

Some of the problems of Christianity strike me as being so blatantly rational-belief-destroying that there is almost a sense of farce in seeing its devotees trying to wriggle from under them. Chief among these is the problem of explaining how somebody's death two thousand years ago can wash away my sins. When you combine this with the doctrine of the Trinity and the implication that the sacrificial lamb is God himself (or itself) and that this therefore makes things all right with this self-same God, the rational mind boggles.¹⁰

Perhaps Dr. Ruse's mind boggles at the saving gospel of Christ, but there have been millions of men and women of rational mind throughout the Christian era who have found profound mental — as well as spiritual — peace only in this great redemptive revelation of God. Rather than bringing the Bible into disrepute, Ruse is fulfilling one of its ancient prophecies: "For the preaching of the cross is to them that perish foolishness; but unto us which are saved it is the power of God" (1 Cor. 1:18).

At least Michael Ruse does have a realistic insight concerning the impossibility of trying to merge the Christian and evolutionary world views.

I have a loathing of attempts to meld science and religion which entail the trimming of religion in such a way that it fits with science, but at the cost of gelding it of real content and mystery — attempts which include the traditional varieties of evolutionary humanism, based all too often on so-called "noble lies" or just plain bad arguments.¹¹

Again, we would urge our evangelical brethren not to yield to the increasingly powerful temptation to trade away their noble biblical, creationist, Christian birthright for an insubstantial (yet toxic) mess of evolutionary pottage.

No Need for God

In addition to accusing God (unintentionally, no doubt, but nevertheless in reality) of cruelty and involving themselves in dishonesty (and

10 Michael Ruse, "From Belief to Unbelief — and Halfway Back," *Zygon*, vol. 29 (March 1994), p. 31.

11 *Ibid.*, p. 33.

all to no avail!) such fence-straddling in effect, does away with God altogether. Dr. William Provine, a widely known and very influential professor of the history and philosophy of science at Cornell University, has noted this point. First, however, he stresses the atheistic character of evolutionary theory and its advocates.

The conflict is fundamental and goes much deeper than modern liberal theologians, religious leaders, and scientists are willing to admit. Most contemporary scientists, the majority of them by far, are atheists or something very close to that. And among evolutionary biologists, I would challenge the reader to name the prominent scientists who are “devoutly religious.” I am skeptical that one could get beyond the fingers of one hand. Indeed, I would be interested to learn of a single one.¹²

Having made this point, Dr. Provine goes on to expose the utter inconsistency of Christians who try to impose God on the evolutionary process.

A widespread theological view now exists saying that God started off the world, props it up, and works through the laws of nature, very subtly, so subtly that his action is undetectable. But that kind of God is no different to my mind than atheism. To anyone who adopts this view I say, “Great, we’re in the same camp; now where do we get our morals if the universe just goes grinding on as it does?” This kind of God does nothing outside of the laws of nature, gives us no immortality nor foundation for morals, or any of the things that we want from a God and from religion.¹³

In the same vein, James Rachels, a professor of philosophy at the University of Alabama, points out the redundant character of such a God.

Suppose God is somehow involved in the process that evolutionary biologists since Darwin have been describing. This would mean that he has created a situation in which his own involvement is so totally hidden that the process gives

12 William B. Provine, “Progress in Evolution and Meaning in Life,” in *Evolutionary Progress*, ed., M. H. Nitecki (Chicago, IL: University of Chicago Press, 1988), p. 69.

13 Ibid., p. 70.

every appearance of operating without any guiding hand at all. . . . But if it is reasonable for us to believe that, then it is reasonable for us to reject the theistic interpretation.¹⁴

Provine and Rachels, of course (as well as many others who could be cited if necessary), are merely echoing the famous words of Sir Julian Huxley, this century's chief protagonist of neo-Darwinism and the keynote speaker at the great Darwinian Centennial Convocation at the University of Chicago in 1959. There, in eulogizing Darwin and commemorating the 100th anniversary of the publication of Darwin's *Origin of Species*, Huxley made the following pronouncement:

Darwinism removed the whole idea of God as the creator of organisms from the sphere of rational discussion.¹⁵

That is, Sir Julian, speaking to and for the world's leaders in evolutionary thought, quite rightly pointed out that the very idea of God is redundant, even irrational, if evolution can indeed explain the origin and development of all things. Why insert an unnecessary factor into the equation when it is not needed? If total evolution is really a proved fact of science, as its devotees like to claim, then Huxley and Provine and their colleagues are quite right in their assertion that God is redundant and therefore non-existent.

Of course, our compromising Christians disagree with this, claiming either that God is behind the scenes directing evolution or else (in the case of the "progressive creationists") interjecting various acts of special creation from time to time into the age-long evolutionary process. But *that* is exactly what Huxley rightly says is irrational. There is no *scientific* evidence for either theistic evolution or progressive creation, as distinct from non-theistic evolution. The same natural processes, the same fossil sequences, the same genetic comparisons apply in all of them. These compromise theories are philosophical whimsies, not scientific ideas. And certainly, as we have seen, the Bible gives us no indication, much less support, of either evolution or geological ages.

The truth is, however, that evolution is *not* a proved fact of science, and, therefore, God *is* necessary to account for this world. As shown persuasively in Volume 2 of this Trilogy, evolution is, if anything, a *disproved* "fact" of

14 James Rachels, *Created from Animals* (New York, NY: Oxford University Press, 1990), p. 125.

15 Julian Huxley, in *Issues of Evolution*, ed. Sol Tax (Chicago, IL: University of Chicago Press, 1960), p. 45.

science! There is no scientific evidence whatsoever that evolution is occurring at present or that it ever occurred in the past, or ever could occur at all.

There is, therefore, no *scientific* need whatever for Christians to try to accommodate this false and harmful world view — or any part of it — into their biblical interpretations. The honest course is either to accept the Bible as it is, the inerrant Word of the living God, or else to follow Huxley and Asimov and Rachels and Gould, and reject it altogether! The middle of the road is a dangerous place to walk, and fence-straddling will sooner or later become very uncomfortable.

Once the literal historicity of the Genesis record is abandoned or made into a mere literary framework (or even worse, ignored), it is only a matter of time before the whole structure of the Christian belief system collapses. As Mattell has noted (with satisfaction, from his atheistic perspective):

Those liberal and neo-orthodox Christians who regard the creation stories as myths or allegories are undermining the rest of Scripture, for if there was no Adam, there was no fall; and if there was no fall, there was no hell; and if there was no hell, there was no need of Jesus as Second Adam and Incarnate Savior, crucified and risen. As a result, the whole biblical system of salvation collapses. . . . Evolution thus becomes the most potent weapon for destroying the Christian faith.¹⁶

Compromising God's Character

However noble may be their intent when they compromise Genesis to try to win committed evolutionists to belief in the God of the Bible, the compromisers will fail. Once again, the main reason that they will certainly fail is because these evolutionists know enough about their theory to recognize that it simply cannot be squared with the biblical revelation of the character of God.

The Distinguished Professor of Philosophy at Colorado State University, Holmes Rolston III, expressed this irreconcilable conflict as follows:

Biologists believe in Genesis, but if a biologist begins reading Genesis, the opening story seems incredible. The trouble is not so much the six days of creation in chapters 1 and 2,

¹⁶ Mattell, "Three Cheers for the Creationists", p. 17.

though most of the controversy is usually thought to lie there, as in chapter 3, where, spoiling the Garden Earth, the first couple fall and Earth becomes cursed. . . . The real problem is with the Fall, when a once-paradisaical nature becomes recalcitrant as a punishment for human sin.¹⁷

Dr. Rolston indicates that he might be open to the idea that the six days of creation correspond to the geological ages, but he *cannot* believe that the age-long reign of suffering and death resulted from human sin:

That does not fit into the biological paradigm at all. Suffering in a harsh world did not enter chronologically after sin and on account of it.¹⁸

The Bible says that it did, however, and that's the problem. Such doctrinaire evolutionists as Rolston and the others cited can read the Bible, and they also know that a God of love would never impose such a cruel regime on the animal world for any other reason.

But nature is also where the fittest survive, "red in tooth and claw," fierce and indifferent, a scene of hunger, disease, death. And nature is what it is regardless of human moral failings, indeed regardless of humans at all.¹⁹

The accommodationist interpreters, whether they call themselves theistic evolutionists, progressive creationists, or even "gap theorists" — all of whom accept the geological ages with their billions of fossils of dead animals preserved in the sedimentary rocks — seem to have very little sensitivity to (or understanding of) God's revealed purpose and ideal order in the animal kingdom. They may acknowledge that *human* suffering and death came into the world only when Adam sinned, but they cannot explain why God allowed multiplied billions of animals to suffer and die during the supposed billion years of life history before man was created.

Nor can they explain why, after Adam did sin and God pronounced the curse on Adam and "the whole creation" (Rom. 8:22) that God *only then* allowed the death of certain specified animals to represent an "atonement"

17 Holmes Rolston, III. "Does Nature Need to be Redeemed?" *Zygon*, vol. 29 (June 1994), p. 205.

18 Ibid. The journal *Zygon* is devoted to studies of problems at the interface between science and religion.

19 Rolston, "Does Nature Need to be Redeemed?" p. 206.

(Lev. 17:11) for the sins of human beings. These same kinds of animals supposedly had already been living and dying for millions upon millions of years before any human sin.

As noted before in the discussion of “Creation and Ecology” (chapter 6), there is a beautiful picture given in the Bible of the divinely intended relationships in God’s animal kingdom:

The wolf also shall dwell with the lamb, and the leopard shall lie down with the kid; and the calf and the young lion and the fatling together; and a little child shall lead them. And the cow and the bear shall feed; their young ones shall lie down together: and the lion shall eat straw like the ox. And the sucking child shall play on the hole of the asp, and the weaned child shall put his hand on the cockatrice’ den. They shall not hurt nor destroy in all my holy mountain: for the earth shall be full of the knowledge of the Lord, as the waters cover the sea (Isa. 11:6–9; see also Isa. 65:25; Ezek. 34:25; Hos. 2:18; etc.).

Whether this passage describes conditions on the earth in the coming kingdom age after Christ returns to earth or not, it undeniably describes the ideal conditions intended by God for His animal creation. Therefore, this must have been the way it was in the beginning, after God had completed His creation work and surveyed it with deep satisfaction. “God saw every thing that he had made, and, behold, it was very good” (Gen. 1:31). Therefore, “God ended his work which he had made; and . . . rested from all his work which God created and made” (Gen. 2:2–3).

God cared for the animals, placing them under man’s stewardship, even authorizing Adam to examine and name them (Gen. 2:19–20). Furthermore, there was an abundance of food for all of them (Gen. 1:30), and *definitely* no “struggle for existence.” The 19th century depiction of “nature red in tooth and claw” (Tennyson) was diametrically opposite to the true picture of the primeval creation as revealed in God’s Word. At that time, all the animals were herbivorous and at peace with one another and with man.

That is not the way it is now, of course, for “sin entered into the world, and death by sin,” so that “the whole creation groaneth and travaileth in pain together until now” (Rom. 5:12; 8:22). God had to tell Adam: “Cursed is the ground [same as ‘earth’] for thy sake” (Gen. 3:17), and Adam’s whole “dominion” (Gen. 1:28) came tragically down with him.

Evolutionists, however, have long regarded this groaning and struggling in nature as the basic means of evolutionary progress. The conclusion

of Charles Darwin's *Origin of Species* even seems to glory in this state of suffering and death:

Thus, from the war of nature, from famine and death, the most exalted object which we are capable of conceiving, namely, the production of the higher animals, directly follows. There is grandeur in this view of life.²⁰

Now, strange and sad to say, a number of leading evangelicals — those espousing either theistic evolution or progressive creation — in their wistful attempt to hang on to the vast geological “ages” of the evolutionists, seem to agree in general with “this view of life.” That is, they also explain suffering and death in the animal kingdom not as a result of God’s curse on the creation because of sin, but as a necessary component of the balance of nature. For example, physicist Don Stoner says:

There is scientific evidence that many creatures, from before the time of men, ate other animals. The evidence says there was animal death before Adam.²¹

Of the many modern progressive creationists who hold similar views, one of the most influential is Hugh Ross. In his recent book (which is mainly a polemic against “young earth creationists,” especially at the Institute for Creation Research), Dr. Ross says this:

An organism’s place in the food chain determines its capacity for efficient work. . . . Considering how creatures convert chemical energy into kinetic energy, we can say that carnivorous activity results from the laws of thermodynamics, not from sin . . . we cannot realistically compare the suffering and death of animals to the suffering and death of humans.²²

Thus, progressive creationists see no theological or biblical problems with having animal death prior to human sin, nor in the idea of billions of animals suffering and dying long before God got around to placing them under man’s dominion (whatever *that* could mean, after the animals had already been around for a billion years).

20 Charles Darwin, *Origin of Species*, (1859), last paragraph.

21 Don Stoner, *A New Look at an Old Earth* (Paramount, CA: Schroeder Publishing, 1985), p. 47.

22 Hugh Ross, *Creation and Time* (Colorado Springs, CO: Navpress, 1994), p. 62–63.

Literal creationists do have problems with this idea, however. The concept of an omnipotent, omniscient, loving, caring God devising such a scheme seems completely incongruous!

Knowledgeable evolutionists have difficulty with it, too. For example, Stephen Jay Gould, probably this nation's most influential evolutionist, emphasizes not only the cruelty of natural history, but also its randomness, with no indication of direction or purpose.

Moreover, natural selection, expressed in appropriate human terms, is a remarkably inefficient, even cruel process. Selection carves adaptation by eliminating masses of the less fit — imposing hecatombs of death as preconditions for limited increments of change. Natural selection is a theory of “trial and error externalism” — organisms propose via their storehouse of information, and environments dispose of nearly all — not an efficient and human “goal-directed internalism” (which would be fast and lovely, but nature does not know the way).²³

Dr. Hugh Ross tries to mitigate the harshness of the process by saying that some kind of “mini-creation” process is activated every time a new species appears, maintaining that these millions of mini-creations that he postulates make him a creationist. It is obvious, however, that such a system is merely theistic evolution under another name. In any case, it does not do away with the utter cruelty and randomness of the whole monstrous system. How can we dare blame God for such a thing? Gould's atheism is much more logical than so-called “progressive creationism”! As mentioned earlier, Dr. David Hull, professor of philosophy at Northwestern University, has said:

Whatever the God implied by evolutionary theory and the data of natural history may be like. . . . He is certainly not the sort of God to whom anyone would be inclined to pray.²⁴

Or, as Dr. Gould said, in an earlier article:

You can hardly blame the divine Paley for not even imagining such a devilish mechanism.²⁵

23 Stephen Jay Gould, “The Power of this View of Life,” *Natural History* (June 1994), p. 6.

24 David Hull, “God of the Galapagos,” p. 486.

25 Stephen Jay Gould, “Darwin and Paley Meet the Invisible Hand,” *Natural History* (November 1990), p. 14.

The God of the Bible is neither capricious nor cruel, and it is a mistake to think that He would use the “devilish mechanism” of billions of years of trial-and-error variation, struggle, suffering, and death in the animal world as prologue to His great plan for creating and redeeming men and women.

His creative purpose, instead, was that “they shall not hurt nor destroy in all my holy mountain.” Anything other than that can only be rightly understood as a later intrusion into God’s “very good” creation.

The leaders of evolutionary thought are indeed intractable. They will never be persuaded by any amount of compromise. Compromise on this vital subject is, in the long run, futile — and perilous!

The Sad Results of Compromise

Indeed, it is dangerous for those that get involved in compromise of creation. One compromise leads to another. Once the safe haven of absolute biblical inerrant authority is left behind, there is no satisfactory or secure resting place. Following the shifting winds of secular intellectual opinion often leads to spiritual shipwreck.

The life and death of Charles Darwin himself is a case in point. Although he has received the adulation of the world for over a century, and was buried with high honors in Westminster Abbey, he never knew peace himself after once placing his faith in evolution. As one of his many biographers, Irving Stone, has noted:

Darwin returned to England at 27 in a robust state of mind and body. It was not until a year later, when he began to write in his evolutionary notebooks, that he first felt and commented on his illnesses, forcing himself into a lifetime of severe, repugnant, and sometimes ludicrous disability.²⁶

Darwin complained all during his life of his constant illnesses, and entire books have been written just about this aspect of his life. Yet in the most exhaustive and modern volume on this subject, a book entitled *To Be an Invalid*, the author, Dr. Ralph Cox, concludes that there was nothing organically or physically wrong with Darwin at all. His granddaughter, Nora Barlow, who edited his autobiography, said he was a hypochondriac.

²⁶ Irving Stone, “The Death of Darwin,” chap. 22, in *Darwin Up to Date*, ed. Jeremy Cherfas, (London: *New Scientist Guide*, IPC Magazines, Ltd., 1982), p. 69. Stone is author of the best-selling biography of Darwin entitled: *The Origin: A Biographical Novel of Charles Darwin*.

The biographer Irving Stone, who is an ardent evolutionary humanist and profound admirer of Charles Darwin, attributed all his troubles to the intense conflicts generated by his evolutionary theory, blaming the opposition of the Christians and creationists of Darwin's day. Stone does acknowledge, however, that Darwin hated to "think about the demon of evolution he had released upon an unwilling and unprepared world."²⁷

Whatever the cause, Charles Darwin was a vigorous, healthy, almost happy-go-lucky young man before he was converted to evolution, but a man of sickly body and troubled mind all his life thereafter. Stone also is anxious to repudiate the widely circulated story of Darwin's repentance and conversion during his final days:

Upon word of his death, his detractors circulated a rumor that he had repented on his deathbed, and asked God's forgiveness for his blasphemies. There was not an iota of truth to the charge, yet it still surfaces today, presented as fact by those who would like to believe it.²⁸

It is not surprising, of course, that belief in evolution leads eventually to inward conviction of guilt, and outward conflict and turmoil. If God does indeed exist, and we are indeed His creatures (and this is surely the teaching of the Bible and of all *true* science), then our very minds and hearts are bound to be programmed God-ward. Rebellion against God — whether in terms of philosophical denial, active disobedience, or careless neglect — is bound, therefore, ultimately to deprive mind and heart and body of the spiritual sustenance they require from their offended Creator.

It is well-known that Darwin studied for the Anglican ministry, though his heart was never really in it. He at least professed nominal belief in biblical creationism in his younger days, but was easily led to believe in progressive creationism when Charles Lyell put forth his arguments for uniformitarianism and the long geological ages. This progressed into theistic evolutionism, and Darwin soon repudiated Christianity altogether, though he still allowed for the possibility of some kind of God creating the very first life form.

But note the comments of Professor L. R. Croft, lecturer in biological sciences at the University of Salford, in England:

²⁷ Ibid.

²⁸ Ibid., p. 69–70. Although there is certainly no firm evidence of Darwin's reputed conversion, there are some possible intimations. See L. R. Croft, *The Life and Death of Charles Darwin* (Lancashire, England: Elmwood Books, 1989), also James Moore, *The Darwin Legend* (Grand Rapids, MI: Baker Book House, 1994).

Darwin was well aware that a satisfactory explanation for the origin of life was of crucial importance to his theory. Undoubtedly he recognized that this was the weakest link in his theory. On the other hand, his early opponents, rather than accept defeat, found that there was a position whereby they might compromise with evolution. . . . The Genesis account of creation could be believed by interpreting the days to be eons of time. Darwin in fact had himself realized that this might be a subtle way of getting acceptance for his theory.²⁹

This was why Darwin allowed for the creation of life at the very end of the first edition of his *Origin of Species*. He deleted this concession to Christians from later editions, after his theory had received wide acceptance from the leading theologians and scientists of the day. Croft, however, notes that this was only a matter of expedience.

Darwin's dishonesty is apparent. He had long been an atheist and had inserted the above paragraph to lessen the tumult he knew his book would create. He no more believed in a Creator than he did in a flat earth.³⁰

This same kind of descent — from strict creationism to progressive creationism to theistic evolutionism to atheistic evolutionism — has been the experience of countless others since Darwin. In fact, many of the most vigorous opponents of Christianity today started out as professing biblical creationist Christians, but they traveled the same downhill road of compromise that Darwin did.

We have already mentioned Michael Ruse, for example. Another prominent modern scientist who testifies to a similar experience is Dr. Edward O. Wilson of Harvard University. Professor Wilson is now one of the world's leading entomologists and is founder and leader of the growing field of "sociobiology." He is an ardent advocate of neo-Darwinism, in opposition to the evolutionary school of punctuated equilibrium, much like Dr. Ruse. He has written the following remarkable testimony:

As were many persons in Alabama, I was a born-again Christian. When I was fifteen I entered the Southern Baptist

29 L. R. Croft, *How Life Began* (Durham, England: Evangelical Press, 1988), p. 20.

30 Ibid., p. 20. Croft has been a diligent researcher into the life and death of Charles Darwin, examining his papers and interviewing the inhabitants of his home community at great length. See also his book *The Life and Death of Charles Darwin*.

Church with great fervor and interest in the fundamentalist religion. I left at seventeen when I got to the University of Alabama and heard about evolutionary theory.³¹

Wilson is now, like Ruse, known as one of the most intransigent enemies of the Christian faith. Such testimonies could be listed in great numbers, not to mention the host of impressionable college students who have been led into compromise and eventual outright unbelief by evolutionist professors.

And what is true of once-Christian individuals is also true of many once-Christian schools and churches and other organizations. Great universities (Harvard, Yale, Princeton, Brown, and many others) were founded as orthodox Christian institutions, and now are essentially schools of atheism. The mainline denominational schools (Baylor, S.M.U., Notre Dame, etc.) may not yet have totally descended into atheism, but they are definitely heading in that fatal direction, having long since abandoned belief in special creation and biblical inerrancy. Even many evangelical schools are today teaching theistic evolution. If one traces out these trends toward apostasy, he will almost always find that they started by questioning and compromising the Genesis record of recent special creation and the worldwide flood.

The same has even been true of many organizations that were founded specifically to oppose evolution and to defend the scientific integrity of Scripture. The venerable Victoria Institute of England, for example, founded in 1865, for many years was a staunch defender of the Christian faith, publishing many articles in defense of strict biblical creationism. It is still in existence today, but for many years now has been dominated by theistic evolutionism. The same is true in this country of the American Scientific Affiliation, founded in 1941. Its original members were strong creationists, but the majority refused to take a positive stand on recent creation and the worldwide flood. For many years the A.S.A. has also been dominated by theistic evolutionists.

The Religion and Science Association was started in 1935, but lasted only two years before being undermined by the progressive creationists in its membership. Similarly, the Society for the Study of Creation, the Deluge, and Related Sciences maintained a strong testimony for creation and the Flood from 1938 to 1945, when it likewise foundered as a result of the

31 E. O. Wilson, "Toward a Humanistic Biology," *The Humanist* (September/October 1982), p. 40.

“long-age” creationists trying to usurp control from the “recent” creationists.

Nevertheless, there are two strong creationist associations in this country, both founded in 1963 and both now stronger than ever. These are the Creation Research Society and the Bible Science Association. Profiting from the sad example of the earlier creationist organizations, both the CRS and the BSA established a strong statement of faith required of all its members and publications, affirming commitment to both literal six-day creationism and the global cataclysmic deluge, as well as absolute biblical inerrancy and the deity and substitutionary atonement of Christ as unchangeable articles of faith. These two organizations have remained strong for well over 30 years precisely because of their refusal to compromise! Furthermore, well over a thousand scientists with M.S. or Ph.D. degrees have been members of CRS, contributing to its creationist research and publication activities.

In England, the Evolution Protest movement, founded in 1932, almost died out because of ongoing commitments by many members to either the day-age theory or the gap theory. In recent years, however, it has again become strong, by changing its name to the Creation Science movement and maintaining full commitment to literal creationism and the worldwide flood.

Details concerning these and other organizations are given in Henry M. Morris’s book, *History of Modern Creationism*.³² The lesson to be learned from all these experiences and organizations is that compromise on creationism tends to lead toward either apostasy or oblivion. But a firm commitment to full biblical authority and strict creationism produces fruitful ministries, stability, and spiritual strength.

32 Henry M. Morris, *History of Modern Creationism* (El Cajon, CA: Institute for Creation Research, 1993), second edition.

Chapter 8

The Importance of Creation

One of the common misconceptions among evangelical Christians is the notion that the doctrine of creation is only a peripheral doctrine, important to scientists and philosophers perhaps, but not to ordinary lay Christians. Winning people to Christ and building them up in the Christian life, they think, are much more important. Furthermore, creationism is so controversial and generates such heated opposition whenever it is advocated that it is best just to ignore it. As long as one believes in God and that He created things, it really doesn't matter how He did it, or when.

But that is the traditional attitude of the head-in-the-sand ostrich. Creation is *not* a peripheral doctrine. In fact, biblical creationism is the most important of all biblical teachings, because it is the very foundation of everything else in the Bible. That is why God put it as the very first revelation in His written Word.

Similarly, the Book of Genesis is the most important book in the Bible, for it is the foundation of every other book of the Bible, without which the whole structure of God's revelation would collapse. Then, further, the very first verse of Genesis is the most important verse in the Bible. If a person *really believes* Genesis 1:1 ("In the beginning God created the heavens and the earth"), he should have no difficulty believing all the rest. On the other hand, if he does not believe *that* verse, he might as well discard the whole Bible, for it becomes no different from any other religious tome or sacred book in value or meaning.

As we shall see in this chapter, creation is the foundation of all the basic doctrines of the Christian faith, and even of true science, as well as of our American nation.

Creation, the Foundation

In a very real sense, the creationist world view is the foundation of all that is good and true in this world and in the world to come. Evolutionism, on the other hand, is the root cause of all that is false and harmful. At this point, however, we wish only to survey the foundational importance of creation to biblical Christianity (the effects of evolution are explored in some depth in Volume 3 of this Trilogy).

1. Foundation of True Religion

The true religion must necessarily be based on worship of the world's true Creator. Other religions may deify great men, or man-made systems, or the world itself, but these are all merely variant forms of humanism, as men "worshiped and served the creature, rather than the Creator" (Rom. 1:25). It is highly significant that all such religions and religious books begin with the creation, rather than the Creator, *except the Bible!* That is, they all start with the universe already in existence, and then try to delineate how the primeval space/matter/time universe somehow developed into its present array of complex systems. This supposed sequence characterizes both ancient paganism and modern humanism; these and all other atheistic, pantheistic, or polytheistic religions are merely various forms of evolutionism. Only in Genesis 1:1 (the foundation of all foundations!) is there a statement of the creation of the universe itself. Without this foundation, true religion is impossible.

Now although creation is the foundation, it is, of course, not the complete structure. Orthodox Judaism and Islam, like Christianity, believe in one eternal Creator, as revealed in Genesis 1:1, but they have rejected Him as Savior. In addition to the general revelation seen in the creation, God has explicitly revealed himself through both His Word and His Son. Those who reject either or both, even though they believe in one God as primeval Creator and, like Christianity, are monotheistic, cannot know God in His fullness. He must be known in His human incarnation as gracious Redeemer as well as omnipotent, but offended, Creator. Therefore, biblical Christianity is the only truly creationist religion.

2. Foundation of Christology

Similarly, neither can one know Christ as He really is if one knows Him *only* as Redeemer. Faint-hearted Christians often justify their lukewarm attitude toward creation by saying that it is more important merely to "preach Christ." They forget that we are preaching "another Jesus" (2 Cor. 11:4) if we do not preach Him as He really is, consistent with His *complete* work. The threefold aspect of the person and work of

Jesus Christ is beautifully outlined in the majestic declaration of Colossians 1:16–20:

- (1) Past work, creation: “By him, were all things created” (Col. 1:16).
- (2) Present work, conservation: “By him, all things consist” (Col. 1:17).
- (3) Future work, consummation: “By him to reconcile all things” (Col. 1:20).

The great scope of this threefold work is “all things in heaven and in earth.” Jesus Christ was Creator before He became the sustainer (or Savior) and reconciler, and the awful price of reconciliation, “the blood of his cross,” is the measure of mankind’s terrible offense against our Creator. That offense, furthermore, consists essentially of rejecting His Word, and thereby denying that He is really the Creator. One truly “preaches Christ” only when he first of all presents Him as the Almighty Creator, from whom man was alienated when he rebelled and repudiated God’s veracity in His Word. Only when this is first understood is it really meaningful to speak of God’s forgiving grace and saving love, His incarnation and redemptive sacrifice as Son of Man.

3. Foundation of Faith

The great message of Christianity is that “the just shall live by faith” (Heb. 10:38), speaking of “them that believe to the saving of the soul” (Heb. 10:39). But exactly what is this *living* faith — this *saving* faith? Faith in the abstract is only naive sentimentality; it must be faith in something and/or someone to have any substance.

The faith of which the apostle speaks, of course, is outlined in the verses immediately following, the great “faith chapter,” Hebrews 11. It is the faith of Abel, offering an acceptable sacrifice; it is Enoch’s faith, pleasing God in obedient witness; it is Noah’s faith, believing and acting on God’s Word; and Abraham’s faith, stepping out trustingly on God’s promises.

But, *first of all*, it is the foundational faith of Hebrews 11:3, the faith by which “we understand that the worlds were framed by the Word of God, so that things which are seen were not made of things which do appear.” This affirmation clearly tells us that any meaningful faith for salvation and the Christian life must be founded, first of all, on faith in God’s special creation of all things, not out of already existing materials, but out of *nothing*, and solely by His omnipotent Word!

4. Foundation of the Gospel

Many Christians who either ignore or compromise the biblical doctrine of creation have urged creationists just to “preach the gospel — not creation!” But this is impossible, because the saving gospel of the Lord Jesus Christ is squarely founded on creation. The wonderful threefold work of Christ (creation, conservation, consummation) as outlined in Colossians 1:16–20, is identified as “the gospel” in Colossians 1:23. The very last reference to the gospel in the Bible (Rev. 14:6–7) calls it the *everlasting* gospel (therefore, it could never have been any different), and its message is to “worship him that made heaven, and earth, and the sea, and the fountains of waters.”

While it is surely true that the central focus of the gospel is on the substitutionary atonement and victorious bodily resurrection of Christ (1 Cor. 15:1–4), it also includes His coming kingdom (Matt. 4:23) and His great creation. Any other gospel is “another gospel” (Gal. 1:6), and is not the true gospel. Without the creation, a supposed gospel would have no foundation; without the promised consummation, it could offer no hope; without the Cross and empty tomb, it has no saving power. But when we preach the true gospel, with the complete person and work of the Lord Jesus Christ as they really are, we build on a “sure foundation,” we can promise a “blessed hope,” and we have available “all power in heaven and earth” through Christ who, in all His fullness, is “with us, even to the end of the world” (Matt. 28:18, 20).

5. Foundation of True Evangelism and Missions

If creation is the foundation of Christology, saving faith, and the saving gospel of Christ, as we have just seen, then it must also be the foundational basis of leading people to Christ as Savior. This is further proved by the fact that the one book of the Bible with a specifically evangelistic purpose begins with the doctrine of creation. The apostle John said that what he had written was to help men to believe on Christ as the Son of God and, thereby, to receive eternal life (see John 20:31). Significantly, then, he began this writing with “In the beginning was the Word. . . . All things were made by him” (John 1:1–3).

Later, after the death and resurrection of Christ, as the apostles scattered everywhere to preach the gospel, they would likewise begin with creation whenever their hearers neither knew nor believed the Scriptures (Acts 14:11–18; 17:22–31). When they preached to those who already believed the Old Testament Scriptures and the Genesis account of creation, they proceeded to preach Christ and His resurrection (e.g., Acts 17:1–3).

Even Christ himself, in His first teaching ministry after His death and resurrection, began with Genesis. “And beginning at Moses and all the prophets, he expounded unto them in all the scriptures the things concerning himself” (Luke 24:27).

If we would follow the example of Christ and His apostles, we also should begin with Genesis and creation if we would firmly ground our potential converts in the truths of the gospel and lead them to a genuine, stable, understanding faith in Christ. This is especially true if they have been raised in a pagan culture or in an educational system structured around evolutionism.

6. Foundation of Home and Family

The most important human institution is that of permanent, monogamous marriage. This was established by God when He created the first man and woman on the sixth day of creation week (Gen. 1:26–28; 2:18–25; also Matt. 19:3–6). The family, especially the father, is then responsible for the teaching and training of the children (Gen. 18:19; Eph. 6:4).

7. Foundation of Salvation

The very reason we need a Savior is that we have rebelled against our Creator, both as individuals and as a whole. Because of His holiness, God must judge and condemn all sin, so none who are in a state of sinful rebellion can possibly have the very fellowship with their Creator for which He had made them. At the same time, since God is both omnipotent and omniscient, He will not fail in His purpose in creation. Consequently, the Creator himself must pay His own righteous penalty for the redemption of sinners and for the sin of the world. Neither angels nor men can accomplish our salvation. Only God the Creator can be our judge, and only He can become, as the God-man and Messiah, “the only wise God our Saviour” (Jude 25).

The Dominion Mandate

When God created man, He placed him in dominion over His entire physical and biological creation, as His steward, not to exploit and misuse, but to develop it for the good of all and the glory of God. He was given “dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth. . . . Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth” (Gen. 1:26–28).

This “dominion mandate,” as it has been called, is still in effect, authorizing every honorable human occupation as necessary to understand

and administer God's great and complex creation. Thus, every person has the high privilege of being a "minister" of the Creator in his or her particular sphere of service.

1. Science and Technology

In order to "subdue" the earth, men must first understand its systems and processes. This implies scientific research. After understanding, comes application or development (engineering, agriculture, medicine, etc.).

Evolutionary assumptions abound in the writings of modern scientists. Leading biologist Stanley D. Beck says, for example:

No central scientific concept is more firmly established in our thinking, our methods, and our interpretations, than that of evolution.¹

But it was not always thus. Beck himself, after defining and discussing the basic premises of science (that is, the existence of a real world, the capability of the human mind to understand that world, the principle of cause-and-effect, and the unified nature of the world), admits that "each of these postulates had its origin in, or was consistent with, Christian theology."² That is, since the world was *created* by a divine Creator, and man was created in God's image, therefore nature makes orderly sense, man is able to understand its operations, and true science becomes possible. If the world were merely the chance product of random forces, on the other hand, then our human brains would be meaningless jumbles of matter and electricity, and science would become nonsense.

Consequently, the great founding fathers of real science (Kepler, Galileo, Pascal, Newton, Boyle, Brewster, Faraday, Linnaeus, Ray, Maxwell, Pasteur, Kelvin, etc.) were almost all creationists, and they believed that they were glorifying God as they probed His works. Yet today such great scientists would not even be considered scientists at all, because they believed in the primeval special creation of all things by God!

In order then to utilize such research and development throughout the creation, all the business occupations would be involved (commerce, communication, marketing, transportation, etc., with all the "service" functions accompanying them). To transmit the information from one generation to another, the educational professions would be necessary.

1 Stanley D. Beck, *Bioscience*, vol. 32 (October 1982), p. 738.

2 Ibid., p. 739.

To interpret and enjoy the creation, the humanities and fine arts would be developed (music, art, literature, etc.). Indeed, all honorable vocations are subsumed under this primeval creation mandate.

2. Human Government

Initially, there would have been no need for men to exercise dominion over other men, so such functions were not included in the original dominion mandate. Sin came into the world, however, and the ultimate result was God's cleansing judgment by the great Flood. When God started over, as it were, with Noah and his family, He not only in effect confirmed the original dominion mandate (Gen. 9:1–2), but also enlarged it with the basic governmental control of life and death over mankind.

"Whose sheddeth man's blood, by man shall his blood be shed: for in the image of God made he man" (Gen. 9:6). With this authorization of capital punishment for murder, some kind of human government became necessary in order for man to be able to properly exercise his stewardship responsibilities over God's creation. Here are implied all the governmental and social occupations of mankind (law, military, police, etc.).

In this original mandate, God did not ordain a particular form of government, but rather only the institution of government. No doubt the ideal form would have been the theocracy that He established later for His chosen nation Israel (note Deut. 4:5–8). Israel failed, however, at least for this present age, and God turned again to the Gentile nations — especially, it would seem, to Europe, and finally, in a distinctive way, to America.

Although not all of America's great founding fathers were Bible-believing Christians, almost all of them were theists and true creationists, believing that God had created the world and man and all natural systems. The colonies had been settled and developed largely by Christian people who had come to this continent to gain freedom to believe and do what the Bible taught and to spread Christianity to the inhabitants, and they acknowledged that the foundational faith was belief in special creation. The historian Gilman Ostrander reminds us:

The American nation had been founded by intellectuals who had accepted a world view that was based upon biblical authority as well as Newtonian science. They had assumed that God created the earth and all upon it at the time of creation and had continued without change thereafter.³

3 Gilman Ostrander, *The Evolutionary Outlook, 1875–1900* (Marston Press, 1971), p. 1.

Note that these great pioneers were *intellectuals*, not ignorant emotionalists. They placed great emphasis on education and science, founding many schools and colleges, in confidence that true learning in any field must be biblically grounded and governed. Christian historian Mary-Elaine Swanson, says:

In colonial times, the Bible was the primary tool in the educational process. In fact, according to Columbia University professor, Dr. Lawrence A. Cremin, the Bible was “the single most primary source for the intellectual history of colonial America.” From their knowledge of the Bible, a highly literate, creative people emerged.⁴

In a July 4 address in 1783, Dr. Elias Boudinot, then president of the Continental Congress, stated that his reason for advocating an annual Independence Day observance in America was the great precedent set by God himself.

No sooner had the great Creator of the heavens and the earth finished his almighty work, and pronounced all very good, but he set apart (not an anniversary, or one day in a year, but) one day in seven, for the commemoration of his inimitable power in producing all things out of nothing.⁵

The fact of creation was also clearly implied several times in the Declaration of Independence (“endowed by our Creator,” “created equal,” “Nature’s God,” etc.). Marshall Foster has pointed out that at least the first 24 state constitutions recognized biblical Christianity as the religion of their states.⁶ Yet today, the Bible, Christianity, and creationism have been banned from the schools of the states, which were founded to teach these very truths! All this has been done in the name of a gross distortion of the First Amendment to the Constitution. The amendment, which was intended to prevent the establishment of a particular national denomination (e.g., Catholic, Anglican), has instead been so twisted as to establish evolutionary humanism in the United States as the quasi-official religion of all our public institutions!

That the primeval dominion mandate is still in effect, with its implied responsibility of all men to their Creator for exercising careful and fruitful stewardship over His creation, is evident from various later

⁴ Mary-Elaine Swanson, *Mayflower Institute Journal* (August 1983), p. 5.

⁵ Dr. Elias Boudinot, Address to the New Jersey Society of the Cincinnati (July 4, 1783).

⁶ Marshall Foster, *Mayflower Institute Journal* (August 1983), p. 1.

passages of Scripture. The mandate itself is cited in such Scriptures as Psalm 8:6–8 and Hebrews 2:6–8. The Christian is not excused from his responsibilities under the dominion mandate just because he is now also under the missions' mandate of Christ's great commission (Matt. 28:18–20; Acts 1:8). Both of these are age-long, worldwide commissions, and, if anything, the Christian "ambassador for Christ" (2 Cor. 5:20) is under even a greater responsibility than the unbeliever to fulfill the first commission, as well as the second.

He is commanded, for example, to serve with enthusiasm in whatever legitimate vocation that he follows, and no calling is excluded if it is done in obedience to God and His Word. "Whatsoever ye do, do it heartily, as to the Lord, and not unto men . . . for ye serve the Lord Christ" (Col. 3:23–24). Likewise, the Christian is commanded to be a good citizen of the secular government — and this also because he is thereby serving God. "Submit yourselves to every ordinance of man for the Lord's sake. . . . as the servants of God" (1 Pet. 2:13–16). Effectiveness in witnessing for Christ under the second mandate, to a large degree is contingent upon our faithfulness under the first mandate — by being good stewards of God's creation, good workers in our jobs, and good citizens of our countries.

Creation in All the Bible

A third indicator of the importance of the doctrine of creation is found in the emphasis that God has placed on it throughout the Bible. Not only is creation the theme of the first and foundational chapters of the Bible (Gen. 1 and 2), but the *restored* creation is the theme of the final, consummational chapters of the Bible (Rev. 21 and 22).

The longest divine monologue in the Bible is God's response to the philosophical disputations of Job and his friends, as recorded in Job 38–41. This response does not deal at all with the issue of human suffering, which these men had been debating for 35 chapters, but solely with God's creation and His providential concern therewith.

The New Testament has many references to creation, with the prologue to John's evangelistic Gospel being of special significance. In fact, every book of the Bible (except the three one-chapter personal epistles of Philem., 2 John, and 3 John) contain one or more references to the people and/or the events of the first 11 chapters of Genesis.⁷

The doctrine of special creation is the foundation of all other Christian doctrines. The experience of belief in Christ as Creator is the

⁷ For listing and exposition of all these references, see *Biblical Creationism*, by Henry M. Morris (Green Forest, AR: Master Books, 1993), 276 p.

basis of all other Christian experience. Creationism is not peripheral or optional; it is central and vital! That is why God placed the account of creation at the beginning of the Bible, and why the very first verse of the Bible speaks of the creation of the physical universe.

Jesus Christ was Creator (Col. 1:16) before He became Redeemer (Col. 1:20). He is the very “beginning of the creation of God” (Rev. 3:14). How then can it be possible to really know Him as Savior unless one also, and first, knows the Triune God as Creator?

The very structure of man’s time commemorates over and over again, week by week, the completed creation of all things in six days. The preaching of the gospel necessarily includes the preaching of creation: “The everlasting gospel to preach unto them that dwell on the earth . . . worship him that made heaven, and earth, and the sea, and the fountains of waters” (Rev. 14:6–7).

One of the greatest blessings of the study of God’s creation is the increasing sense of wonder and gratitude that it generates. The planning and fabrication of the infinite array of beautiful stars in the heavens and animals and plants on the land and in the sea, with systems of incredible complexity and marvelous symbiosis, can only be explained in terms of an omniscient Creator!

Praise to God for His Creation

One of the greatest mysteries of human nature is the fact that intelligent scientists, familiar with these phenomena, can actually attribute them to blind chance, acting through random mutations and natural selection processes operating on eternal matter. The only explanation of this strange belief is, as the Apostle says, they “became vain in their imaginations. . . . Professing themselves to be wise, they became fools. . . . they did not like to retain God in their knowledge” (Rom. 1:21–28).

The normal response to the beauty and order of the creation, however, is one of thanksgiving and praise! This is one of the dominant themes of the writers of the Bible, especially in the Book of Psalms. A few of such passages are noted below:

For great is the Lord, and greatly to be praised: he also is to be feared above all gods. For all the gods of the people are idols: but the Lord made the heavens (1 Chron. 16:25–26).

Rejoice in the Lord, O ye righteous: for praise is comely for the upright. . . . By the word of the Lord were the heavens

made; and all the host of them by the breath of his mouth (Ps. 33:1, 6).

Let us come before his presence with thanksgiving. . . . The sea is his, and he made it: and his hands formed the dry land. O come, let us worship and bow down: let us kneel before the Lord our Maker (Ps. 95:2, 5–6).

Know ye that the Lord he is God: it is he that hath made us, and not we ourselves. . . . Enter into his gates with thanksgiving, and into his courts with praise: be thankful unto him, and bless his name (Ps. 100:3–4).

I will praise thee; for I am fearfully and wonderfully made: marvelous are thy works; and that my soul knoweth right well (Ps. 139:14).

O give thanks unto the Lord of lords. . . . To him that by wisdom made the heavens To him that stretched out the earth above the waters To him that made great lights: for his mercy endureth forever (Ps. 136:3–7).

Sing unto the Lord with thanksgiving; sing praise upon the harp unto our God: Who covereth the heaven with clouds, who prepareth rain for the earth, who maketh grass to grow upon the mountains (Ps. 147:7–8).

Let them praise the name of the Lord; for he commanded, and they were created (Ps. 148:5).

And when those beasts give glory and honour and thanks to him that sat on the throne, who liveth for ever and ever . . . saying, Thou art worthy, O Lord, to receive glory and honour and power: for thou hast created all things, and for thy pleasure they are and were created (Rev. 4:9–11).

Many other such references abound in the Bible, ascribing praise and thanks to God for His magnificent work of creation and for His providential and loving care thereof. In contrast to the people who offer such praises, however, those who refuse to acknowledge and thank God for His creation are condemned in these words of bitter irony:

For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are

made, even his eternal power and Godhead; so that they are without excuse: Because that, when they knew God, they glorified him not as God, neither were thankful; but became vain in their imaginations, and their foolish heart was darkened (Rom. 1:20–21).

But there is another important teaching of Scripture on the theme of thanksgiving. There is a greater number of references in the Bible to giving thanks and praise for God's work of salvation and personal guidance than even for His work of creation. Christ's work of creation is foundational, but His work of salvation is both transformational and motivational! We are "created in Christ Jesus unto good works" (Eph. 2:10).

A beautiful study of "first mentions" is found in the Bible in this connection. The main Hebrew word for "give thanks" is *yadah*, which is often translated "praise." It occurs first in Genesis 29:35, when Jacob's wife Leah gave birth to Judah: "And she said, Now will I praise the Lord: therefore she called his name Judah."

As events later developed, Judah turned out to be the most Christlike of Jacob's sons (in his willingness to give up his life for his brothers), and he was selected as the one through whom Christ would come (Gen. 49:10). Thus, the first mention of giving thanks to the Lord introduces us, in a human type, to His coming work of salvation.

The New Testament word for "give thanks" is the Greek *eucharisteo*. It occurs first in Matthew 15:36–37, in which the Lord Jesus Christ manifested himself as Creator and sustainer, creating a great quantity of food for the multitude: "And he . . . gave thanks. . . . And they did all eat, and were filled."

The first recorded thanksgiving in the Old Testament was for Judah, whose very name means "thanks," pointing forward to God's work of salvation. The first recorded thanksgiving in the New Testament was by the promised Son of Judah, the Lord Jesus, whose very name means "salvation," looking back to God's work of creation. Today, let us praise the Lord continually, first for His splendid creation, but even more for His gracious salvation!

Chapter 9

Jesus Christ — Creator and Redeemer

Christians are so accustomed to thinking of Jesus in His human manifestation that they tend to overlook the fact — even though they know it doctrinally — that He was also our great Creator. We can never fully understand, at least not in this life, the doctrines of the Trinity and the Incarnation, but we can believe them.

Before His incarnation in human flesh, Christ was one with the eternal Father as God the eternal Son, and also one with the eternal Holy Spirit — one God, in three persons, the Holy Trinity. At His incarnation, He became the Son of Man, evermore thereafter to be in human flesh, while still retaining His deity and eternal status as Son of God.

Though we cannot understand these mysteries, we can at least *feel* them, and *know* them by faith as true when we read the Scriptures and experience the presence of the Lord Jesus in our lives, through His Holy Spirit. And in our study of creation, we do well to remember that all three persons of the godhead participated in the work of creation and now participate in the work of conserving, or saving, their creation.

Since it is the second person, the Lord Jesus Christ, who “declares” God to us (John 1:18) as we *see* Him on the earth in His incarnation, *hear* Him speak through the Scriptures, and *sense* His presence through the Holy Spirit, it is *His* work of creating us and then redeeming us from sin that we wish to emphasize in this chapter. Therefore, when we speak of God, whether as Creator or Redeemer, in a very real sense we are speaking of the Lord Jesus Christ.

King of Creation

The most important of all truths, the foundation of all doctrine, the beginning of all reality, is the *fact* that God in Christ is Creator! There is no possibility of really knowing the fullness of *anything* until we first know that the origin and meaning of *everything* is God. What He *does* is *right*, and what He *says* is *true* — by definition! (See John 14:6.)

“In the beginning God created the heaven and the earth.” These opening words of the Bible constitute what is at once the most simple and the most profound statement ever made. This is the most widely known sentence ever written, easily understood by the simplest child, yet inexhaustibly compatible with the most advanced scientific comprehension of the universe. The *eternal* God created time in the beginning of time. The *infinite* God created the unbounded space of the heavens. The *omnipotent* God created the elements of matter comprising the earth and all other systems within the space/time cosmos. The *transcendent* God created, for He was prior to created time and external to created space. The Creator is an eternal, infinite, omnipotent, transcendent Being.

Furthermore, God is both personal and omniscient, capable of creating spiritual and intelligent beings who in turn can examine and comprehend the intelligible universe that He created. And since He created both the universe and the creatures who must comprehend it, it is clearly necessary that acknowledgment of Him as Creator must precede any meaningful study and understanding of His creation.

When the primeval words of Genesis 1:1 were first spoken and recorded (most likely to and by Adam himself), there was no need to defend them, for there was no one who disbelieved them. But then, through Satan (and man’s disobedience), sin came into the world. In heaven, at the very throne of the King of creation, one of God’s created spirit beings, the anointed cherub Lucifer, rebelled against his Creator (despite the revealed fact that he had been “created” — Ezek. 28:15). Lucifer sought to “exalt his throne” and to be “as the most High” (Isa. 14:13–14); therefore, he was cast down by God to the earth (Ezek. 28:17), the dominion of those human persons whom God had created “in his own image” (Gen. 1:27) — and *for* whom Lucifer and all other angels had been created to be “ministering spirits” (Heb. 1:14).

On earth, as “that old serpent” (Rev. 12:9), Satan led the first man and woman (Adam and Eve) to follow his own rebellious desire to be “as gods” (Gen. 3:5), and since that tragic time all mankind has shared in Adam’s primeval (or original) sin, “worshiping and serving the creation more than the Creator, who is blessed for ever” (Rom. 1:25). In the minds

and hearts of men, God is no longer King, and, therefore, they are “without God” (literally “a-theists” — Eph. 2:12). They now love “the things that are in this world” (1 John 2:15), and “walk according to the course of this world” (Eph. 2:2), serving “the god of this world” (2 Cor. 4:4), but there is no hope for men in this world (Eph. 2:12).

Nevertheless, it is Lucifer (now become Satan, the devil, the adversary) who has been dethroned, not God! God is still on His throne, the eternal King of creation.

It is important to note in Scripture just a few of the many references to God as King. He is “a great King” (Mal. 1:14), an “everlasting King” (Jer. 10:10), and is “the blessed and only Potentate” (1 Tim. 6:15).

1. He is the **King of time**, for He created time: He is “*my King of old*” (Ps. 74:12) and “*sitteth King for ever*” (Ps. 29:10).
2. He is the **King of space**, for He created infinite space. He is “*King of heaven*” (Dan. 4:37), the “*King invisible*” (1 Tim. 1:17), who “*hast made heaven, the heaven of heavens, with all their host*” (Neh. 9:6), although even “*heaven and the heaven of heavens cannot contain thee*” (2 Chron. 6:18).
3. He is the **King of matter**, for He made all “things” in space and time. He is “*King of all the earth*” (Ps. 47:7), and all “*give glory and honour and thanks to him that sat on the throne . . . saying, Thou art worthy . . . for thou hast created all things*” (Rev. 4:9–11).
4. He is the **King of energy**, for He has energized and empowered an infinite and eternal universe. God is Light, the “*King of glory*” (Ps. 24:10), “*dwelling in the light which no man can approach unto*” (1 Tim. 6:16).
5. He is the **King of life**, since He is “the *King immortal*” (1 Tim. 1:17), “*who only hath immortality*” (1 Tim. 6:16), and He is the One who “*giveth to all life, and breath, and all things*” (Acts 17:25).
6. He is the **King of all the angels**, the host of heaven, “*For by him were all things created, that are in heaven . . . whether they be thrones, or dominions, or principalities, or powers*” (Col. 1:16). He is “the *King, the Lord of hosts*” (Zech. 14:16).
7. He is the **King of all nations**, both “the *King of Israel*” (John 1:49) and “*King of nations*” (Jer. 10:7, literally “*King of Gentiles*”).
8. He is the **King of all the redeemed**, those who have been “*translated . . . into the kingdom of his dear Son*” by “*redemption through his blood, even the forgiveness of sins*” (Col. 1:13–14). Therefore, He has become also the “*King of saints*” (Rev. 15:3),

and He will one day be universally acclaimed as “*King of kings*, and Lord of lords” (1 Tim. 6:15; Rev. 17:14; 19:16).

Since He created all things, He is indeed the *king of all creation*, the potentate and sovereign, Master and ruler, Lord and judge of all things. As His creatures, we can only acknowledge His authority, trust His wisdom, believe His Word, obey His commandments, receive His grace, accept His salvation, and praise His name!

But the sad, strange thing is that there are multitudes of people who rebel against His authority, refuse His salvation, and even deny His true existence as the only personal Creator God. “Professing themselves to be wise, they became fools, and changed the glory of the uncorruptible God into an image made like to corruptible man, and to birds, and fourfooted beasts, and creeping things” (Rom. 1:22–23).

In every age people have been unwilling to believe in God as Creator and to submit to His authority, so they have invented lesser gods to serve. They have given the created world itself the attributes of deity, stupidly, rebelliously believing that the universe is the ultimate reality. They have “changed the truth of God into a lie, and worshipped and served the [creation] more than the Creator” (Rom. 1:25).

Of course, the only alternative to creation is evolution, whether it be the naïve evolutionism of ancient polytheism (which deified the forces of nature as heavenly “birds and fourfooted beasts and creeping things”) or the more modern evolutionism of the Darwinians (which invests such impersonal processes as mutation and natural selection with imaginary creative powers). No imagined substitute for the Creator, of course, can really *create* anything, and the only explanation for the age-long compulsion of men to believe in such counterfeits is that “they did not like to retain God in their knowledge” (Rom. 1:28). They have “imagined a vain thing” (Ps. 2:1).

But whether or not men believe in the great King of creation, He still *is* the Creator. “For what if some did not believe? shall their unbelief make the faith of God without effect? God forbid: yea, let God be true, but every man a liar” (Rom. 3:3–4).

The believer in evolution (whether in the pantheistic polytheism of the ancients or the naturalistic humanism of the moderns) is described in the Bible as “without excuse” and “willingly ignorant” (Rom. 1:20; 1 Pet. 3:5). He must believe that *effects* can be greater than their *causes*, that *random* mindless particles can generate *complex* reasoning people, and that magic wands can transform frogs into princes.

When the Israelites turned from serving their Creator to worshipping idols, God rebuked them with these words:

As the thief is ashamed when he is found, so is the house of Israel ashamed . . . saying to a stock, Thou art my father; and to a stone, Thou hast brought me forth (Jer. 2:26–27).

And if it is shameful foolishness for a man to believe that his origin was from a wooden or stone image that he himself had made, how much more foolish it is to believe that a living, thinking human being could emerge from the non-living chemicals of a primeval soup! Surely the readers of these words will not be guilty of such unreasoning credulity as that! “Know ye that the Lord he is God: it is he that hath made us, and not we ourselves; we are his people, and the sheep of his pasture” (Ps. 100:3). “For the Lord is a great God, and a great King above all gods” (Ps. 95:3).

Pre-Incarnate Appearances of God to Man

Since God is omnipresent, He is necessarily invisible, at least in the essential triune glory of the godhead. Yet He had created man in His own image, for fellowship with himself, and therefore He somehow must reveal himself to man in a form of manifestation accessible to the human senses (sight, hearing, touch) — that is, in effect, He must appear in the form of an angel, or even as a man.

God is also omnipotent, and therefore He can do this whenever and however He so wills. To actually become man’s Redeemer and Savior, however, He must do more than *appear* as man, He must *be* a man, able to suffer and die for man’s sin, and then also to defeat death and rise from the dead as a glorified and immortal man, yet still physically a real man. Here we encounter the amazing event of God’s eternal Son becoming incarnate forever as the Son of Man.

One of the most familiar passages in the Bible — familiar because of its frequent appearance on Christmas cards and in Christmas sermons — is also one of the most profound and mysterious passages in the Bible. I am referring to Isaiah 9:6–7.

For unto us a child is born, unto us a son is given: and the government shall be upon his shoulder: and his name shall be called Wonderful, Counselor, The mighty God, The everlasting Father, The Prince of Peace.

The mystery is how a mere child, born like other children, could also be “The everlasting Father.” The very words seem to constitute, in the

modern parlance, an “oxymoron,” that is, an impossible contradiction in terms.

The same mystery is evident in that other very familiar Christmas verse, Micah 5:2:

But thou, Bethlehem Ephrata, though thou be little among the thousands of Judah, yet out of thee shall He come forth unto me that is to be ruler in Israel; whose goings forth have been from of old, from everlasting.

That is, how could a Babe be “brought forth” (note verse 3) from a mother in Bethlehem when He had already been “going forth” from everlasting?

Then, consider also the wondrous prophecy of the virgin birth, “which was spoken of the Lord by the prophet [that is, in Isa. 7:14] saying,” as proclaimed by the angel in Matthew 1:23:

Behold, a virgin shall be with child, and shall bring forth a son, and they shall call His name Emmanuel, which being interpreted is, God with us.

God himself — “with us” — in the guise of a virgin-born child! How can such things be?

God himself had told Moses: “There shall no man see me, and live” (Exod. 33:20). Similarly, the apostle Paul spoke of God as “dwelling in the light which no man can approach unto; whom no man hath seen, nor can see” (1 Tim. 6:16).

Indeed, the very concept of an everlasting, omnipotent God who created the mighty universe seems impossible to grasp by mere mortals, especially by those astronomers and cosmologists whose whole careers are spent in studying the universe and trying to understand its origin and nature. Surveys have shown that only a very small percentage of scientists in these fields are active in any kind of church. Their very purpose in life seems to be to try to explain not only the presumed evolution of the universe, but even its very existence, without God! The big-bang theory, with its initial period of supposed “inflation,” increasingly involves the assumption (at least by those who think about origins at all) that our universe simply evolved out of nothing, by means of a “quantum fluctuation in the primeval state of nothingness,” or some such strange notion.

Such explanations are considered by secular scientists to be preferable to believing that “in the beginning, God created the heavens and the

earth” (Gen. 1:1). While it is true that one cannot *prove* that God created, neither can anyone prove that the universe created itself. At least the concept of Almighty God as Creator presents a reasonable First Cause, able to account for the complex of myriad effects that comprise the cosmos, whereas the assumed primeval nothingness explains nothing! Creationists, therefore, have a *reasonable faith*, based on good evidence, whereas cosmic evolutionists have a highly *credulous faith*, based on the omnipotence of “nothing.”

It may, indeed, be true that we cannot actually “see” God, for He is “the King eternal, immortal, invisible, the only wise God” (1 Tim. 1:17). Christ himself said that “no man hath seen God at any time” (John 1:18). And to those in this scientific age who stress that the scientific method requires “observability,” this may seem to be a problem.

But the fact is that God *has* been seen by men! Enoch and Noah both “walked with God” (Gen. 5:24; 6:9), and “the Lord appeared unto Abram” (Gen. 12:7; 17:1; 18:1), as well as Isaac (Gen. 26:2). Also, Jacob testified: “I have seen God face to face, and my life is preserved” (Gen. 32:30).

Scripture also says that Moses was a man “whom the Lord knew face to face” (Deut. 34:10). During the period of the conquest and the judges, there were several occasions when “the angel of the Lord” appeared to men and was recognized as the Lord himself (note the case of Gideon and also that of the parents of Samson, for example — Judges 6:22; 13:21–22). The patriarch Job could say, after deliverance from his sufferings: “I have heard of thee by the hearing of the ear: but now mine eye seeth thee” (Job 42:5).

Much later, the great prophet Isaiah testified: “I saw also the Lord sitting upon a throne, high and lifted up” (Isa. 6:1). Ezekiel also saw that “upon the likeness of the throne was the likeness as the appearance of a man upon it. . . . This was the appearance of the likeness of the glory of the Lord” (Ezek. 1:26–28).

Still other occasions are recorded in the Old Testament when the Lord appeared to men, either in a vision or “face to face,” as well as even more times when He “spoke” audibly to men. As would be expected, numerous skeptics throughout the centuries have said that this was one of the Bible’s “contradictions.” In many places, they say, the Bible says that no man can see God, whereas in other places it says that many men *did* see God.

This superficial discrepancy, of course, is beautifully resolved by the wonderful truth of the triune godhead, and was specifically clarified by the Lord Jesus Christ, when He said:

No man hath seen God at any time: the only begotten Son, which is in the bosom of the Father, he hath declared him (John 1:18).

That is to say, whenever the omnipresent, invisible God has deigned to appear to men, He has done so in the person of His eternal Son, who is “the image of the invisible God” (Col. 1:15).

Since the Son is, indeed, “in the form of God . . . equal with God” (Phil. 2:6), He too is omnipotent and can surely assume the form of an angel or of a man or even of a burning bush (note Exod. 3:2–6), when He so wills. Thus, men have on occasion in the past actually seen God. It was not God in His essential triune glory, of course, but, rather, God declared and manifested as God the eternal Son, forever “in the bosom of the Father” (John 1:18), yet eternally “going forth” (Mic. 5:2) to manifest the godhead.

All such appearances of God to men were what are called “theophanies,” or pre-incarnate appearances of Christ. The English word “theophany” is from two Greek words meaning “God appearing,” and it beautifully defines these many appearances of God the Son to men before He actually *became* man, as the Lord Jesus Christ, the Messiah!

Now, however, He has become forever Emmanuel, “God with us!” He who was the very “brightness of (God’s) glory, and the express image of his person” (Heb. 1:3), “was made in the likeness of men” (Phil. 2:7). He was one with “the Mighty God” and “the Everlasting Father,” but has now become one with us, “made like unto his brethren” (Heb. 2:17) in order that He, as Emmanuel, might also become “JESUS: for he shall save his people from their sins” (Matt. 1:21). He who had “created all things” (Eph. 3:9) finally created a human body in which He himself would dwell and in which He would then die for our sins and rise again for our justification.

The Word [that is, the creating Word!] was made flesh, and dwelt among us, (and we beheld his glory, the glory as of the only begotten of the Father) full of grace and truth (John 1:14).

His 1st-century disciples were thus privileged to see God “manifest in the flesh” and then “received up into glory” (1 Tim. 3:16). We who live in the 20th century have not been given that particular privilege, although He does, even now, “abide” in us by His Spirit (note John 14:21–23; 15:15).

But we also shall see Him in the flesh one of these days, for He is still a true man, resurrected and glorified, forever the Son of Man as well as God. Furthermore, “when he shall appear, we shall be like him; for we shall see him as he is. And every man that hath this hope in him purifieth himself, even as he is pure” (1 John 3:2–3).

And when we finally see Him, it will be far more glorious than when John and Peter saw Him by the Sea of Galilee. The only place in the Bible where His physical appearance as Son of Man is actually described is when John saw Him on the Isle of Patmos, many years later, after His resurrection and ascension. Here is how John saw Him, and this is how we shall see Him, not as a baby in a manger and not as our sin-bearing substitute nailed to a cross, but as our eternal King of kings and Lord of lords!

I saw . . . one like unto the Son of man, clothed with a garment down to the foot, and girt about the paps with a golden girdle. his head and his hairs were white like wool, as white as snow; and his eyes were like a flame of fire; And his feet like unto fine brass, as if they burned in a furnace; and his voice as the sound of many waters. And he had in his right hand seven stars: And out of his mouth went a sharp two-edged sword: And his countenance was as the sun shineth in his strength (Rev. 1:12–16).

Then, when we, as his heavenly bride, the true Church, shall “see him as he is,” we can say with thanksgiving, “This is my beloved, and this is my friend” (Song of Sol. 5:16).

The Incarnation

In the beginning was the Word . . . and the Word was God. . . . All things were made by him. . . . And the Word was made flesh (John 1:1–14).

We can never *understand* the doctrine of the incarnation, whereby God the Creator became man the creature, for it is beyond the limits of finite comprehension. But we can *believe* it, and rejoice in it!

In fact, we *must* believe it, for “every spirit that confesseth not that Jesus Christ is come in the flesh is not of God” (1 John 4:3). “If ye believe not that I am he,” said the Lord Jesus, “ye shall die in your sins” (John 8:24).

We not only *must* believe, but we *can* believe, for He has proved himself to be God Incarnate by “many infallible proofs” (Acts 1:3), especially by His bodily resurrection after dying for our sins. Thereby has God “given assurance unto all men, in that he hath raised him from the

dead” (Acts 17:31). Only the Creator of life could defeat death. Buddha is dead and Mohammed is dead, and so are Confucius and Plato and all the great men who ever lived, but the “Word made flesh” who was “put to death in the flesh” (1 Pet. 3:18) has been raised from the dead and is “alive for evermore” (Rev. 1:18)! “Wherefore he is also able to save them to the uttermost that come unto God by him” (Heb. 7:25).

1. How Could the Creator Become Man?

Since “by him [that is by Christ, the Word of God] were all things created, that are in heaven, and that are in earth” (Col. 1:16), He must have created the very body in which He would dwell when He “was made flesh.” This body, however, could not be a body produced by the normal process of human reproduction, for it must be a body unmarred either by inherent sin spiritually or by inherited genetic defects physically or mentally.

It would necessarily have to be a perfect body, a body like that of the first man, Adam, whom He had created long ago in the beautiful Garden of Eden. He would, in fact, come to be called “the last Adam” (1 Cor. 15:45), since there would never be another man created as that “first Adam” had been. There would be one important difference, however. The first Adam was created and made as a full-grown man, but the second must be “in all things . . . made like unto his brethren” (Heb. 2:17). From conception to death, He must be “in all points . . . like as we are, yet without sin” (Heb. 4:15). In particular, His blood must be “precious blood . . . as of a lamb without blemish and without spot” (1 Pet. 1:19), for that blood must be “offered . . . without spot to God” (Heb. 9:14).

Therefore, the body of the second Adam must be formed directly by God and placed in a virgin’s womb. This was the very first promise made after the first Adam brought sin and death into the world. Speaking of “the woman, and . . . her seed,” God said that He “shall bruise thy head, and thou shalt bruise his heel” (Gen. 3:15). The prophecy was addressed to Satan, whose lie had elicited Eve’s sin. This wonderful body of Jesus would not grow from a man’s seed, as in every other human birth, nor would it grow from a woman’s egg, for in either way a sin-carrying and mutation-riddled embryo would necessarily result. It must instead be a seed uniquely and miraculously formed by the Creator himself, then planted in the virgin Mary’s womb. The body growing from this perfect seed would become His “tabernacle” for 33 years as He lived on His planet Earth among those whom He had come to save.

“Lo, I come,” He would later promise through David (Ps. 40:7). Through Isaiah He said: “[The] virgin shall conceive, and bear a Son,” and that child would also be “the mighty God, the everlasting Father”

(Isa. 7:14; 9:6). Still later, another inspired prophet would anticipate that “The Lord hath created a new thing in the earth, a woman shall compass a man” (Jer. 31:22).

Note that the “new thing” in the chosen woman must be “*created*.” When the time came, the angel assured young Mary that “The Holy Ghost shall come upon thee, and the power of the highest shall overshadow thee: therefore also that holy thing which shall be born of thee shall be called the Son of God” (Luke 1:35).

Then, “when he cometh into the world, he saith . . . a body hast thou prepared me” (Heb. 10:5). Most significantly, He used the same word “prepared” (Greek, *katartizo*), which the writer of Hebrews also then would use when he testified that “the worlds were *framed* by the Word of God” (Heb. 11:3), recognizing that the same Living Word who had framed the worlds had also framed His own human body! And in that tiny cell in Mary’s womb resided all the information not only for His own growth into manhood, but also for the creation, preservation, and redemption of the whole creation. It was His by right of creation and soon would be doubly His by right of redemption.

2. When Did the Creator Become Man?

It has become customary in much of the world to observe the Creator’s incarnation on December 25, which is assumed to be the date of the birth of Jesus. However, various other dates have been observed by different groups or promoted by various writers, dates in January or March or October, for example. The Early Church apparently never observed Christmas at all, and the date of December 25 began to be identified as Jesus’ birthday only in about the fourth century. In fact, many believe that Christmas celebrations are essentially a continuation of the old Roman Saturnalia or other pagan practices centering upon the winter solstice, during the year’s longest nights.

The fact, however, is that no one really knows the date of His birth, so no one should be dogmatic on this subject. Nevertheless, there is one particularly intriguing possibility: On the night that Christ was born, shepherds were in the field watching their sheep (Luke 2:8). Although it is barely possible that this could be in late and cold December, it seems far more likely that it would be sometime in the early fall.

If so, the birth of Jesus would have been in the fall, and it is significant that there was an ancient Christian feast called Michaelmas, observed on September 29 by many early Christians, especially in England and western Europe. The name later was also appropriated to identify a period during the fall when certain courts were in session.

In any case, the name “Michaelmas” meant “Michael sent,” just as “Christmas” means “Christ sent.” It is very probable that Michael was the “angel of the Lord” (Luke 2:9) who was sent from heaven to announce the birth of Jesus to the shepherds. The Feast of Michaelmas thus may well have originated to commemorate this coming of Michael and the angels to welcome Jesus at His human birth.

This date would be just days before the great Feast of Tabernacles, which the pre-exilic Israelites observed each fall in gratitude for the annual harvest, with each family dwelling for a time in a tent, or “tabernacle.” When John wrote that “the Word was made flesh, and dwelt among us” (John 1:14), he did not use the usual Greek word for “dwell.” Instead, he said, literally, that the Word (that is, the Creator) “tabernacled” among us for a time. It was as though He had come into the world at just the appropriate time for the joyful Feast of Tabernacles, as Michael and the angels sang of “good tidings of great joy, which shall be to all people” (Luke 2:10)!

As glorious as the birth of Christ may have seemed, however, this was *not* His incarnation. He had already been “made in the likeness of men” (Phil. 2:7) nine months earlier, when He created a body for himself and took up His residence in Mary’s womb. *That* was the time when “the Word was made flesh!”

And so it may be wonderfully significant that the real “Christmas” (i.e., “Christ sent”), when the Christ was sent from His throne in heaven to enter a “tabernacle” of flesh, would have been nine months earlier than “Michaelmas,” when Michael and the angels were sent to announce His birth. But that brings us back to December 25 again! The actual number of days between the two dates is 278, which is the ideal period of human gestation.

Whether or not these inferences are correct (and, remember, no one really *knows* when Christ was born), they at least yield a greater appreciation of His miraculous conception! How appropriate it would be for Him to enter the world right at the season of darkest and longest night, for He would come as “the light of the world” (John 8:12) to bring “life and immortality to light through the gospel” (2 Tim. 1:10). Then, at “Christmas” time, we can remember and commemorate with deep thanksgiving (not with Saturnalian revelry and pagan greed) the amazing Christmas gift of God himself, when “God sent his only begotten Son into the world, that we might live through him” (1 John 4:9)!

3. Why Did the Creator Become Man?

No question that begins with “Why?” can be answered scientifically. Such questions can be answered only theologically, and that

means they can only be *truly* answered from the written Word of God, the Bible. And this greatest of all questions has the most wonderful of all answers!

For God sent not his Son into the world to condemn the world; but that the world through him might be saved (John 3:17).

When the fullness of the time was come, God sent forth his Son, made of a woman, made under the law, To redeem them that were under the law (Gal. 4:4–5).

This is a faithful saying, and worthy of all acceptance, that Christ Jesus came into the world to save sinners (1 Tim. 1:15).

But that is not all, of course. His first coming, followed by His sacrificial death, bodily resurrection, and glorious ascension, is a prophetic promise of His second coming.

At His first coming, He “tabernacled” among us for a little while; at His second coming, there will be “a great voice out of heaven saying, Behold, the tabernacle of God is with men, and he will dwell with them, and they shall be his people, and God himself shall be with them, and be their God. And God shall wipe away all tears from their eyes; and there shall be no more death, neither sorrow, nor crying, neither shall there be any more pain: For the former things are passed away” (Rev. 21:3–4). “And there shall be no night there . . . for the Lord God giveth them light: and they shall reign for ever and ever” (Rev. 22:5).

How infinitely sad it is that so many today reject or ignore such a gracious, loving, holy, powerful Creator/Redeemer. Not only do they miss all the true meaning and blessing of Christmas now, but, unless they respond to Him in repentance and faith, they will be everlastingly separated from Him in the glorious eternal ages to come.

Creation and the Cross

Thus, the Creator who has become Savior will also be consummator and eternal sovereign. The coming of the Creator into the world — both for His human incarnation and for His final, everlasting reign — comprises all the motivation and power for Christian faith and life. But to understand the meaning of His coming, one must first understand and believe the record of His primeval work of creation and man’s terrible rebellion against Him, followed by the curse.

At creation, the Lord looked forward to the Incarnation. At the Incarnation, He had to anticipate the Cross. Then, on the Cross, He

looked beyond to the crown! The eternal Word, by whom all things were made, was himself made flesh (John 1:1–3, 14), when He came into the world that He had made. Thus did creation foretell Christmas, and Christmas fulfill creation!

The word “Christmas,” in its primary sense, means “Christ-sent,” or “Christ’s Mission” (the suffix *mas* is derived ultimately from the Latin *mittere*, “to send”). He came as God’s greatest missionary, manifesting the love of God toward us, “because that God sent his only begotten Son into the world, that we might live through him” (1 John 4:9).

But this required the Cross, and so He “became obedient unto death, even the death of the cross” (Phil. 2:8). Nevertheless, He, “for the joy that was set before him endured the cross, despising the shame” (Heb. 12:2), and, therefore, He will some day be crowned King of kings and Lord of lords.

One of the most poignantly sad verses in all the Bible is John 1:10. “He was in the world, and the world was made by him, and the world knew him not.” How could it possibly be that men and women, lovingly formed and commissioned by their maker to enjoy productive and happy lives in a world of beauty and fullness, could then turn on Him and refuse His loving care and guidance?

Yet that is what Adam and Eve did even though they had walked with Him and talked with Him in the beautiful garden that He had planted for them. Worse, that is what the whole of humanity did when God the Creator eventually came into the world again, this time only to be despised and crucified by the ones He loved. But, of course, those were cruel days, when people were still brutish, and ignorant, caring little for the grace of life, steeped in the carnality of pagan religion and unaware of their long-forgotten maker. If only He had waited until our 20th century to come into the world, when the marvels of modern science and communication, culture and education, would have spread the joyful news quickly all over the world!

But, then, as one takes a closer look at the pseudo-intellectual arrogance of the establishment scientists, the skeptical bias of the communications media, the depravity of modern pseudo-intellectual humanistic culture, and the anti-creationist mindset of the educators, it becomes obvious that Christ would be even more vehemently and viciously repudiated in the modern world than He was in the ancient world.

As a matter of fact, He *will* be coming again one day into the world that was made by Him, and the world will indeed know Him this time

— not as a loving Savior, but as an offended and wrathful Creator and judge! “God that made the world and all things therein . . . hath appointed a day, in the which he will judge the world in righteousness by that man whom he hath ordained; whereof he hath given assurance unto all men, in that he hath raised him from the dead” (Acts 17:24, 31).

Until He comes again, however, this is still the age of grace and there is still the wonderful Christmas message of salvation to all who will hear. The great Creator has become the incarnate Word, and the Savior of men. “He came unto his own, and his own received him not. But as many as received him, to them gave he power to become the sons of God, even to them that believe on his name” (John 1:11–12).

Christmas is thus only one stage, a preparatory stage, in God’s great plan of the ages. Yet it is the only one which the world as a whole acknowledges. Creation is denied, the Cross is ignored, and the coronation is ridiculed; but Christmas is eulogized, commercialized, and scandalized. It often seems as though human activities for the first 51 weeks of each year are designed merely to support a year-end madness of covetousness and carnality in its final week.

But there is much *beyond* Christmas! For the Lord Jesus, there was a lifetime of service and sacrifice, consummated by eternal joy. “As my Father hath sent me, even so send I you,” He said. For us also, as His servants, there must be service and sacrifice and, then, ultimately thankful satisfaction and joy everlasting.

Before Jesus actually went to the cross, He lived the greatest human life, performed the mightiest works, and left the finest teachings that the world has ever known. God had become man, in Jesus Christ, and He not only revealed God, but He also revealed man as God had intended man to be.

In addition to showing us how to live, He also taught us what to believe. Among many other things, He taught us what we should believe about creation.

Jesus the Creationist

When God became man, He became man as God *intended* man to be. He lived as God wanted man to live (1 Pet. 2:21), and He thought as God intended man to think (Phil. 2:5). What the Lord Jesus Christ believed, His disciples must believe, if they are truly His disciples. Thus, so-called “Christian evolutionists” in effect are denying His lordship. It may indeed be possible for a Christian to be an evolutionist (either through ignorance or deliberate disobedience), but evolution itself cannot be Christian, for the obvious reason that Christ was not an evolutionist. Consequently, there is no such thing as Christian evolution!

True Christians, of course, accept the authority of the Lord Jesus Christ, so they certainly should no longer accept evolution — once they realize that He believed and taught the historicity and accuracy of the literal Genesis record of special creation. The following quotations from His own words indicate how clear and comprehensive was this teaching of Jesus.

1. He accepted the compatibility of the two supposedly contradictory accounts of creation in Genesis 1 and Genesis 2.

Have you not read that he . . . made them male and female [quoting Gen. 1:27], And said, For this cause shall a man leave father and mother, and shall cleave to his wife: and, they twain shall be one flesh? [quoting Gen. 2:24] (Matt. 19:4–5).

2. He accepted the historicity of the creation record, basing His teaching concerning the integrity of the home, the most basic of all human institutions, on its truthfulness.

Wherefore they are no more twain, but one flesh. What therefore God hath joined together, let not man put asunder (Matt. 19:6).

3. He believed that the creation of man and woman was at the beginning of the creation, not four billion years *after* the earth's beginning and 15 billion years after the “big bang.”

From the beginning of the creation God made them male and female (Mark 10:6).

4. He believed that the cosmos actually had a beginning, and not that matter was eternal.

Such as was not since the beginning of the world [Greek *kosmos*] to this time (Matt. 24:21).

5. He believed that it was God who did the creating, not some natural process.

From the beginning of the creation which God created (Mark 13:19).

6. He believed in the fixity of the created kinds.

Do men gather grapes of thorns, or figs of thistles? . . . A good tree cannot bring forth evil fruit, neither can a corrupt tree bring forth good fruit (Matt. 7:16–18).

7. He believed in the Sabbath as a rest day in commemoration of God's completed creation.

The sabbath was made for man, and not man for the sabbath (Mark 2:27).

8. He believed that the world had been "founded," not just accidentally condensed from agglomerations of particles.

For thou lovedst me before the foundation of the world (John 17:24).

9. He believed that even the sun belonged to God.

He maketh his sun to rise (Matt. 5:45).

10. He accepted the record that God had made even the fowls of the air and had made provision for their food (as noted in Gen. 1:30).

Behold the fowls of the air . . . your heavenly Father feedeth them (Matt. 6:26).

These and other teachings of Christ, plus the complete absence of any reference by Him either to evolution or long ages (both of which beliefs were universally accepted by the pagan philosophers of His day) make it undeniable that He accepted the account of special creation recorded in Genesis as completely authoritative and accurate in the most literal sense. Therefore, no true believer in *His* authority and integrity can afford to do less.

A Tale of Two Weeks

The two greatest events in all human history are the creation of the world and the redemption of the world. Each of these events involved a great divine week of work and a day of rest.

Creation week accomplished the work of man's formation; the week that is called Holy Week or Passion Week (perhaps a better term would be Redemption Week) accomplished the work of man's salvation.

Creation week, which culminated in a perfect world (Gen. 1:31), was followed by man's fall and God's curse on the world (Gen. 3:17). Passion Week, which culminated in the death and burial of the maker of that perfect world, is followed by man's restoration and the ultimate removal of God's curse from the world (Rev. 22:3). A tree (Gen. 3:6) was the

vehicle of man's temptation and sin; another tree (1 Pet. 2:24) was the vehicle of man's forgiveness and deliverance.

It is fascinating to compare the events of the seven days of creation week with those of redemption week. The chronology of the events of redemption week has been the subject of much disagreement among scholars, and it may not be possible to be certain on a number of the details. The discussion below is not meant to be dogmatic, but only to offer a possible additional dimension to their understanding and harmony. The traditional view that Friday was the day of the crucifixion is further strengthened by the correlations suggested in this study.

First Day. The first day of creation involved the very creation of the universe itself (Gen. 1:1). An entire cosmos responded to the creative fiat of the maker of heaven and earth. Initially, this space/mass/time (i.e., heaven, earth, beginning) continuum was created in the form of basic elements only, with no structure and no occupant (Gen. 1:2), a static suspension in a pervasive, watery matrix (2 Pet. 3:5). When God's Spirit began to move, however, the gravitational and electromagnetic force systems for the cosmos were energized. The waters and their suspensions coalesced into a great spherical planet and, at the center of the electromagnetic spectrum of forces, visible light was generated (Gen. 1:3).

In a beautiful analogy, on the first day of Passion Week, the Creator King of the universe entered His chosen capital city (Zech. 9:9–10; Matt. 21:1–9) to begin His work of redemption, as He had long ago entered His universe to begin His work of creation. Even the very elements that He had created (Luke 19:39–40) would have acknowledged His authority, though the human leaders of His people would not.

Second Day. Having created and activated the earth, God next provided for it a marvelous atmosphere and hydrosphere, in which, later, would live the birds and fishes. No other planet, of course, is supplied with air and water in such abundance, and this is strong evidence that the earth was uniquely planned for human and animal life. The hydrosphere was further divided into waters below and waters above "the firmament." The waters above the firmament (the Hebrew word for *firmament* means, literally "stretched-out space") probably comprised a vast blanket of transparent water vapor, maintaining a perfect climate worldwide, with ideal conditions for plant, animal, and human longevity.

Paralleling the primeval provision of life-sustaining air and water, on the second day of redemption week, He (the Christ) entered again into the city (having spent the night in Bethany) and taught in the temple. As He approached the city, He cursed the barren fig tree (Mark 11:12–14)

and, then, in the temple, overthrew the tables of the money changers (Mark 11:15–19). This seems to be the second time in two days that He turned out the money changers (the parallel accounts in Matthew and Luke indicate that He also did this on the first day)

Both actions — the cursing of the fig tree and the cleansing of the temple — symbolize the purging of that which is barren or corrupt in the Creator's kingdom. He had created a world prepared for life (air for the breath of life and water as the matrix of life), but mankind, even the very teachers of His chosen people, had made the world unfruitful and impure. As physical life must first have a world of pure air and water, so the preparations for a world of true spiritual life require the purifying breath of the Spirit and the cleansing water of the Word, preparing for the true fruit of the Holy Spirit and the true temple of God's presence, in the age to come.

Third Day. The next day, the sight of the withered fig tree led to an instructive lesson on faith in God, the Lord Jesus assuring the disciples that real faith could move mountains into the sea (Mark 11:19–24). In parallel, on the third day of creation, God had actually called mountains up out of the sea (Gen. 1:9–10)!

It was also on this day that the Lord had the most abrasive of all His confrontations with the Pharisees and Saducees. He spoke many things against them, and they were actively conspiring to destroy Him. It is appropriate that His challenges to them on this day began with two parables dealing with a vineyard (Matt. 21:28–43; see also Mark 12:1–11 and Luke 20:9–18), in which He reminded them that they had been called to be in charge of God's vineyard on the earth and had failed. Like the fig tree, there was no fruit for God from their service, and, therefore, they would soon be removed from their stewardship.

Likewise, the entire earth was on the third day of creation week prepared as a beautiful garden, with an abundance of fruit to nourish every living creature (Gen. 1:11–12), and it had all been placed in man's care (Gen. 1:28–30; 2:15).

But mankind in general, and the chosen people in particular, had failed in their mission. Before the earth could be redeemed and made a beautiful garden again (Rev. 22:2), it must be purged, and the faithless keepers of the vineyard replaced.

This third day of Passion Week was climaxed by the great sermon on the Mount of Olives in which the Lord promised His disciples that, though Jerusalem must first be destroyed, He would come again, in power and great glory, to establish His kingdom in a New Jerusalem (Matt. 24 and 25; Mark 13; Luke 21). It was appropriate that He should

then spend the night following that third day with the handful of disciples who were still faithful to Him, on the Mount of Olives (Luke 21:37), for the mount would call to memory that far-off third day of creation week when He had drawn all the mountains out of the sea. Also, the Garden of Gethsemane on its slopes, with its little grove of vines and fruit trees, would bring to mind the beautiful Garden of Eden and the verdant world He had planted everywhere on the dry land on that same third day. Because of what He was now about to accomplish at Jerusalem (Luke 9:31), the ground would one day be cleansed of its curse, and all would be made new again (Rev. 21:4).

Fourth Day. On the fourth day of creation week, the Lord Jesus formed the sun and the moon and all the stars of heaven. There had been “light” on the first three days, but now there were actual *lights*! Not only would the earth and its verdure be a source of beauty and sustenance to man, but even the very heavens would guide his way and keep his time.

But instead of the stars of heaven turning man’s thoughts and affections toward his Creator, they had been corrupted and identified with a host of false gods and goddesses (see Job 25:5). Furthermore, instead of creating a sense of awe and reverence for the majesty of the One who could fill all heavens, they bolstered man’s belief that the earth is insignificant and meaningless in such a vast, evolving cosmos. Perhaps thoughts such as these troubled the mind of the Lord that night as He lay on the mountain gazing at the lights He had long ago made to overcome the darkness.

When morning came, He returned to Jerusalem, where many were waiting to hear Him. He taught in the temple (Luke 21:37–38), but the synoptic gospels do not record His teachings. This lack, however, is possibly supplied in the apparently parenthetical record of His temple teachings as given only in the fourth Gospel (John 12:20–50) because there the Lord twice compared himself to the light He had made: “I am come a light into the world, that whosoever believeth in me should not abide in darkness” (John 12:46). “Yet a little while is the light with you. Walk while ye have the light, lest darkness come upon you: for he that walketh in darkness knoweth not whither he goeth” (John 12:35). He who was the true light must become darkness, in order that, in the new world, there would never be night again (Rev. 22:5).

Fifth Day. There is little information given in the gospels about the fifth day of redemption week. When there were yet “two days” until the Passover (Mark 14:1), right after the bitter confrontation with the scribes and chief priests on the third day, these enemies began actively

seeking a means to trap and execute Jesus, though they feared to do it on the day on which the Passover Feast was to be observed (Mark 14:2).

It was either on the fourth day or possibly on this fifth day, which was the feast day, that Judas Iscariot went to them with his offer to betray Jesus. He had apparently been seriously thinking about this traitorous action ever since the night when the Lord had rebuked him for his greed. This had been in the home in Bethany, on the night of the Sabbath, just before the day when Christ entered Jerusalem riding on the ass (John 12:1–8). This seems to have occurred at the same supper described in Matthew 26:6–13 and Mark 14:3–9, even though in these it is inserted parenthetically after the sermon on the Mount of Olives, probably in order to emphasize the direct causal relation of that supper to Judas' decision to betray his Master (Matt. 26:14–16; Mark 14:10–11).

On this day of the Passover, the Lord Jesus instructed two of His disciples to make preparations for their own observance of the feast that night (Mark 14:12–17). So far as the record goes, this is all that we know of His words during that day, though there is no doubt that He was teaching in the temple on this day as well (Luke 21:37–38). Perhaps this strange silence in the record for this fifth day is for the purpose of emphasizing the greater importance of these preparations for the Passover. The fact that John indicates the preparation day to have been the following day (John 19:14) is probably best understood in terms of the fact that, at that time, the Galileans are known to have observed the Passover on one day and the Judeans on the following day.

Multitudes of sacrificial lambs and other animals had been slain and their blood spilled through the centuries, but this would be the last such acceptable sacrifice. On the morrow, the Lamb of God would take away the sin of the world (John 1:29). He would offer one sacrifice for sins forever (Heb. 10:12). With the blood of His cross, He would become the great peacemaker, reconciling all things unto the maker of those things (Col. 1:16, 20).

As the Lord thought about the shedding of the blood of that last Passover lamb on that fifth day of Holy Week, He must also have thought of the fifth day of creation week, when He had first created animal life. "God created every living creature (Hebrew *nephesh*) that moveth" (Gen. 1:21). This had been His second great act of creation, when He created the entity of conscious animal life (the first had been the creation of the physical elements, recorded in Gen. 1:1). In these living animals, the "life" of the flesh was in their blood, and it was the blood which would later be accepted as an atonement for sin (Lev. 17:11). Note that the

words “creature,” “soul,” and “life” all are translations of the same Hebrew word *nephesh*. Surely the shedding of the innocent blood of the lamb that day would recall the far-off day when the “life” in that blood had been created. And because He, the Lamb of God, was about to become our Passover (1 Cor. 5:7), death itself would soon be swallowed up in victory and life (1 Cor. 15:54).

Sixth Day. On the sixth day, man had been created in the image and likeness of God, the very climax and goal of God’s great work of creation (Gen. 1:26–27). But on this sixth day, God, made in the likeness of man, finished the even greater work of redemption.

Under the great curse the whole creation had long been groaning and travailing in pain (Rom. 8:22). But now the Creator himself had been made the curse (Gal. 3:13; Isa. 52:14), and it seemed as though the creation also must die. Though He had made heaven and earth on the first day, now He had been lifted up from the earth (John 3:14) and the heavens were silent (Matt. 27:46). Though He had made the waters on the second day, He who was the very water of life (John 4:14) was dying of thirst (John 19:28).

On the third day He had made the dry land, but now “the earth did quake, and the rocks rent” (Matt. 27:51) because the rock of salvation had been smitten (Exod. 17:6). He had also covered the earth with trees and vines on that third day, but now the true vine (John 15:1) had been plucked up and the green tree (Luke 23:31) cut down. He had made the sun on the fourth day, but now the sun was darkened (Luke 23:45) and the Light of the World (John 8:12) was burning out. On the fifth day He had created life, and He himself was life (John 11:25; 14:6), but now the life of his flesh, the precious blood, was being poured out on the ground beneath the cross, and He had been brought “into the dust of death” (Ps. 22:15). On the sixth day He had created man and given him life, but now man had despised the love of God and lifted up the Son of Man to death.

Seventh Day. But that is not the end of the story, and all was proceeding according to “the determinate counsel and foreknowledge of God” (Acts 2:23). “On the seventh day God ended his work which he had made” (Gen. 2:1). Furthermore, everything that He had made “was very good” (Gen. 1:31). God’s majestic work of creation was complete and perfect in every detail.

And so is His work of salvation! This is especially emphasized in John’s account: “After this, Jesus knowing that all things were now *accomplished*, that the Scripture might be *fulfilled*, saith, I thirst. . . . When Jesus therefore had received the vinegar, he said, it is *finished*: and he

bowed his head, and gave up the ghost” (John 19:28–30 — the emphasized words are all the same word in the Greek original). Jesus had finished all the *things* He had to do, and then He finished the last of the prophetic *Scriptures* that must be carried out. Then, and only then, was the work of redemption completed and the price of reconciliation fully paid, so that He could finally shout (Matt. 27:50) the great victory cry, “*It is finished!*”

The record of creation stresses repeatedly that the entire work of the creation and making of all things had been *finished* (Gen. 2:1–3). In like manner does John’s record stress repeatedly the *finished* work of Christ on the cross. Furthermore, as the finished creation was “very good,” so is our finished salvation. The salvation which Christ thus provided on the cross is “so great” (Heb. 2:3) and “eternal” (Heb. 5:9), and the hope thereof is “good” (2 Thess. 2:16).

Then, finally, having finished the work of redemption, Christ rested on the seventh day, His body sleeping in death in Joseph’s tomb. He had died quickly, and the preparations for burial had been hurried (Luke 23:54–56), so that He could be buried before the Sabbath. As He had rested after finishing His work of creation, so now He rested once again.

On the third day (that is, the first day of the new week), He would rise again, as He had said (Matt. 16:21, et al.) His body had rested in the tomb all the Sabbath day, plus part of the previous and following days, according to Hebrew idiomatic usage, “three days and three nights” (Matt. 12:40) — but death could hold Him no longer. He arose from the dead, and is now alive forevermore (Rev. 1:18).

Creation and Resurrection

Although most world religions believe in the immortality or transmigration of the soul after death, only three believe in the actual resurrection of the body. It is no coincidence that these are also the three monotheistic religions, believing in the special creation of all things, by a transcendent personal Creator God. The three religions, of course, are Orthodox Christianity, Orthodox Judaism, and Orthodox Islam, and all three base their belief in creation on the Book of Genesis, the only book that tells of the actual creation of the space/time universe itself.

Unfortunately, however, Judaism and Islam refuse to acknowledge that only the Creator can be the Redeemer, and so reject the bodily resurrection of Christ, even though they may believe Him to be a great teacher and prophet. They still believe in a future resurrection, but it is a belief without foundation. Only the Creator of life can defeat death. Nevertheless, the fact that they recognize resurrection to be somehow contingent on creation is significant.

The two greatest events in the history of the cosmos were, first of all, its supernatural creation and, secondly, the Resurrection of its Creator from the dead. The evidence for each, to one whose mind and heart are open to evidence, is overwhelming. All real science points to creation, and the best-proved fact of history is the Resurrection.¹ The Bible, of course, teaches that both are vitally true, vitally important, and vitally related, but even to one who does not believe the Bible; the evidence is still unanswerable. He may reject it, but he cannot refute it.

Furthermore, each is necessary to the other. The creation, invaded and permeated by decay and death, heading down toward ultimate chaos, can only be saved and renewed if death is defeated and life is restored by its Creator. The Resurrection, conversely, triumphing over death and promising ultimate restoration of the perfect creation, can only be accomplished by the Creator himself. The creation requires the Resurrection, and the Resurrection requires the Creator.

It is appropriate, therefore, that the Holy Scriptures so frequently tie together the creation of the world and the Resurrection of Jesus Christ. The creation took place on the first day of creation week, and the Resurrection likewise took place on the first day of the week following the Creator's substitutionary death for the world's redemption.

Death first entered God's finished creation when Adam sinned (Gen. 2:16–17; 3:17–20; Rom. 5:12).

"But now is Christ risen from the dead, and become the first-fruits of them that slept. . . . The last enemy that shall be destroyed is death." (1 Cor. 15:20, 26). Therefore, when the heavens and earth are made new again, the very elements will have been purged of the age-long effects of sin and the curse, decay and disintegration, and "there shall be no more death" (Rev. 21:4; also 2 Pet. 3:10–13; Isa. 65:17; 66:22; Rev. 21:1; 22:3).

The first book of God's written Word begins with the mighty creation of heaven and earth (Gen. 1:1), but ends with "a coffin in Egypt" (Gen. 50:26). The final book of God's Word introduces Jesus Christ as "the first begotten of the dead" (Rev. 1:5) and ends with "all things made new" (Rev. 21:5).

Let us consider, therefore, three basic aspects of the Christian life which can be greatly strengthened by a clearer understanding and broader application of these two vitally related facts of creation and Resurrection. For each, a key passage of Scripture will be found especially illuminating.

1 Many volumes have been written on the evidences for Christ's bodily resurrection. For a brief summary of these evidences, see Henry M. Morris' book, *Many Infallible Proofs* (Green Forest, AR: Master Books, 1974), p. 88–97.

1. Christian Assurance

In a society dominated by humanistic unbelief and worldly intimidation, Christians need more than emotionalism to assure them that their Christian faith in the person and work of Jesus Christ not only “works,” but is *true*. In the great “Resurrection chapter,” 1 Corinthians 15, the apostle Paul is seeking to do just this — to assure these young and somewhat carnal Corinthian believers of the genuine validity of the Christian “gospel” which he had preached to them and which they had believed (verses 1–2). He stresses the key importance of the bodily Resurrection of Christ, with the overwhelming eyewitness verification of its historicity (verses 3–11), and then concludes that this guarantees the future resurrection of all who “have hope in Christ,” the great promise of the Christian faith (verses 12–19).

But that isn’t all. He further emphasizes that Christ’s Resurrection does far more than provide a future life for individual believers. It restores man’s lost estate, reversing the consequences of Adam’s primeval sin, conquering all the enemies of God and finally destroying death itself (verses 20–28). This great promise not only gives assurance of eternal life, but strength for a godly position and persecution, knowing beyond all doubt there is a better life to come (verses 29–34).

And then, to give still further assurance, he ties it all back to the mighty power of God in creation. All components of the creation (biological — verses 35–39, physical — verses 40–41, and human — verses 42–49) are treated. Every individual creation of God has been designed with its own marvelous structure for its own divine purpose, “as it hath pleased him” (verse 38). Since each is distinct, none could have “evolved” from any other; therefore only God was capable of creating it, and only He can preserve and revive it. As he raised up Christ from the dead, so will He not only raise, but transform, purify and immortalize our present bodies and the entire travailing creation (verses 50–57; see also Rom. 8:18–23). The concluding exhortation, therefore, is to “be steadfast” in our Christian faith and “always abounding” in our Christian work, in absolute assurance that this is *not* “in vain” (verse 58).

2. Christian Revival

The great need of the Christian church today is revival — not from apostasy, but from apathy and compromise. Apostate churches, denying the basic doctrines of Christianity, are not real churches, but mere socio-religious clubs, and their members still need to be saved. There are multitudes of generally sound churches and believers, however, that have become *neutral* in their stance, whenever they face the controversial issues

that require them to choose between conformity to and confrontation with the world system that surrounds them.

Such churches are typified by the church at Laodicea (Rev. 3:14–22), the last of the churches addressed in the seven letters of Revelation 2–3. This church represents a real Christian church, with its candlestick still in place (Rev. 1:20; 2:5), one which seems to be doing well outwardly, in “need of nothing” materially, but one which is “lukewarm,” and therefore “wretched” spiritually (verses 15–17). Such churches are urgently in need of revival, not a revival of mere emotional activity, but one of real substance and truth (verse 18) — that is, repentance (verse 19).

It is significant that the Lord Jesus Christ, in addressing the Laodicean church, begins with an emphasis on the creation and ends with the Resurrection and promised consummation. These are the most fundamental of all doctrines, consequently the ones most resisted by the world, and thus the doctrines on which there is the greatest temptation to become “lukewarm.” The Lord calls such churches first of all to recognize Him as the “Amen, the faithful and true witness, the beginning of the creation of God” (verse 14). He concludes by reminding them that His Resurrection and ascension provide the only assurance of their own future resurrection for the coming kingdom. “To him that overcometh will I grant to sit with me in my throne, even as I also overcame, and am set down with my Father in his throne” (verse 21). How urgent is it for churches today, with all their emphasis on self-centered spirituality and so-called abundant living, to get back to an understanding and proclamation of the bedrock doctrines of creation and Resurrection.

3. Christian Witness

When a Christian has firm assurance of his own salvation and is properly motivated in terms of God’s eternal purposes, then it is his responsibility to bear witness to others who need this great salvation, wherever and by whatever means he can, as God leads and enables.

No doubt the greatest Christian witness was the apostle Paul, and his example surely deserves study and emulation. It is significant that Paul always began where his listeners already were, in their own prior understanding of God and His purposes. When they already knew and believed the Old Testament Scriptures, he would show them from the Scriptures that Christ was the promised Messiah, going on from there to the Resurrection as the conclusive proof. When, however, his listeners neither knew nor believed the Scriptures, he would start with the evidence of God in creation, which they had distorted into a pantheistic polytheism. The classic example is that of the Greek philosophers at Athens (Acts 17:15–34). Note his words:

Whom therefore ye ignorantly worship, him declare I unto you. God that made the world and all things therein, seeing that he is Lord of heaven and earth . . . giveth to all life, and breath, and all things (Acts 17:23–25).

Then, in anticipation of the natural question as to how one would know which of the “gods” was really the God who had created all things, the Apostle first had to point out that the Creator of all men must also be the Judge of all men, and that all men needed to repent and turn back to Him.

Because he hath appointed a day, in the which he will judge the world in righteousness by that man whom he hath ordained; whereof he hath given assurance unto all men, in that he hath raised him from the dead (Acts 17:31).

This two-fold testimony — creation pointing to the fact of God and the Resurrection identifying the person of God — constitutes an irrefutable witness, so that God in perfect equity on this basis, “commandeth all men every where to repent” (verse 30). Even though death triumphs over all other men, it could never defeat the Creator of life, and no one who believes in creation should ever stumble at the Resurrection. As Paul challenged King Agrippa, “Why should it be thought a thing incredible with you, that God should raise the dead?” (Acts 26:8).

By the same token, one who accepts the factuality of Christ’s Resurrection should never stumble over God’s record of creation. Yet there seem to be multitudes of compromising Christians today who are willing to believe that Christ was raised from the dead but who still reject His testimony about creation. “From the beginning of the creation God made them male and female,” He said (Mark 10:6, referring to Gen. 1:27). Not after 18 billion years of cosmic history and 4.5 billion years of earth history, but *from the beginning of the creation*, God made man and woman. In fact, the very purpose of the earth’s creation was that it should be a home for “the children of man” (Ps. 115:16). How can a Christian believe Christ’s words and then reject Moses’ words?

For had ye believed Moses, ye would have believed me: for he wrote of me. But if ye believe not his writings, how shall ye believe my words? (John 5:46–47).

The Lord Jesus said, in two of the great “I am” passages of the Book of Revelation:

I am Alpha and Omega, the beginning and the ending . . . which is, and which was, and which is to come, the Almighty (Rev. 1:8).

And then He also said:

I am he that liveth, and was dead; and, behold, I am alive for evermore. Amen; and have the keys of hell and of death (Rev. 1:18).

He is both “before all things” and the “firstborn from the dead” (Col. 1:17–18). Therefore, He is “able also to save them to the uttermost that come unto God by him” (Heb. 7:25).

Chapter 10

Creation and the Eternal Kingdom

The Creator, being both omniscient and omnipotent, cannot fail in His purpose in creating the universe, life and man. He has allowed sin and death to come in for a little time, but these will soon be removed, and all the redeemed will have the endless ages of eternity to enjoy the fellowship with God for which they were created. “In the ages to come, he [will show] the exceeding riches of his grace in his kindness toward us through Christ Jesus” (Eph. 2:7). Because our Creator has loved us so much that He died for our sins, and then rose from the dead, our future (if we have believed on Him as our Savior and Lord) is secured. “Because I live,” He has promised, “ye shall live also” (John 14:19).

The Bondage of Decay

Right now, the world doesn't look very promising, however. In addition to the moral chaos that seems to be engulfing the earth, the very earth itself is in the grip of what the Bible calls “the bondage of corruption,” or decay (Rom. 8:21). The great curse pronounced on the earth in the garden of Eden, because of Adam's sin (Gen. 3:19), has taken a terrible toll over the years. As noted earlier, this “bondage” is actually recognized by scientists as a law of nature, the law of increasing entropy, or the second law of thermodynamics. By any definition, this is one of the best-proved and most widely applicable laws of science.

According to the second law of thermodynamics, this planet on which we live is going to die. The sun which supplies its energy will someday burn out and the entire solar system will then quickly perish. Indeed, so far as we can tell, the universe itself is dying. The great agnostic Bertrand Russell sadly commented, many years ago:

Some day, the sun will grow cold, and life on earth will cease. The whole epoch of animals and plants is only an interlude between ages that will be too cold. . . . This, at least, is what science regards as most probable, and in our disillusioned generation, it is easy to believe. From evolution, so far as our present knowledge shows, no ultimately optimistic philosophy can be validly inferred.¹

Long before the sun grows cold, as a matter of fact, the earth could die biologically. The hydrosphere and atmosphere are becoming polluted, the soil is being eroded, the nutrients in the soil are being leached away, and food supplies are increasingly contaminated.

Man has long been aware that his world has a tendency to fall apart. Tools wear out, fishing nets need repair, roofs leak, iron rusts, wood decays, loved ones sicken and die, relatives quarrel, and nations make war.²

Somewhat more recently, the environmentalist and socialist Jeremy Rifkin pointed up this problem very sharply.

The entropy law will preside as the ruling paradigm over the next period of history. Albert Einstein said that it is the premier law of all science; Sir Arthur Eddington referred to it as the supreme metaphysical law of the entire universe.³

Later in his book, Rifkin made the following observation:

Now that the environment we live in is becoming so dissipated and disordered that it is apparent to the naked eye, we are beginning for the first time to have second thoughts about our views on evolution, progress, and the creation of things of material value.⁴

This universal tendency toward decay and death seems obvious to everyday experience, but was only formalized as a law of science a little over a century ago. It is significant, therefore, that this principle has been noted in the Bible for thousands of years.

1 Bertrand Russell, *Religion and Science* (New York, NY: Oxford University Press, 1961), p. 81.

2 Van Rensselaer Potter, "Society and Science," *Science* (Volume 146, October 20, 1964), p. 1018.

3 Jeremy Rifkin, *Entropy: A New World View* (New York, NY: Viking Press, 1980), p. 6.

4 *Ibid.*, p. 55.

Of old hast thou laid the foundation of the earth: and the heavens are the work of thy hands. They shall perish, but thou shalt endure: yea, all of them shall wax old like a garment; as a vesture shalt thou change them, and they shall be changed. (Ps. 102:25–26).

For the heavens shall vanish away like smoke, and the earth shall wax old like a garment, and they that dwell therein shall die in like manner (Isa. 51:6).

Heaven and earth shall pass away (literally “are passing away”), but my words shall not pass away (Matt. 24:35).

For we know that the whole creation groaneth and travaileth in pain together until now (Rom. 8:22).

This universal law of decay is considered today as among the most certain of all scientific principles. As the second law of thermodynamics, or the law of increasing entropy, it governs all natural processes. It is also called “time’s arrow.” As time goes on, the arrow points down!

But the same law that prophesies eventual disintegration also testifies of primeval creation. Instead of a message of consummate pessimism as interpreted by Bertrand Russell and Jeremy Rifkin, therefore, the entropy principle really speaks of ultimate divine purpose in creation. Since the universe is now “running down,” it must once have been “wound up.” There must be a great First Cause able to create a universe. Thus the real message of the second law of thermodynamics is: “In the beginning God created the heavens and the earth” (Gen. 1:1).

God is omniscient and omnipotent, and He certainly cannot fail in His purpose in creation. Even though the whole creation is groaning and travailing together in pain, its present “bondage of decay” cannot possibly continue forever. Long before it reaches ultimate death, God will intervene, and “the creation itself also shall be delivered from the bondage of corruption into the glorious liberty of the children of God” (Rom. 8:21).

Just as the study of present processes cannot tell us anything about the past events of the creation period, neither can present processes give us any information about the future events of the deliverance period. The processes of the present are the only processes accessible to the scientific method, and they all operate within the framework of the second law. Thus, present processes can give us no information about any processes

of creation, past or future, since they are diametrically opposite to the decay processes as specified by the second law. Biblical revelation is required for information about both the first creation and the new creation.

Happily, however, “we have also a more sure word of prophecy; whereunto ye do well that ye take heed, as unto a light that shineth in a dark place, until the day dawn, and the day star arise in your hearts” (2 Pet. 1:19).

The Eternal Earth

Much is revealed in Scripture about the future of planet Earth, but we first need to resolve what seems initially to be an apparent contradiction in these prophecies. That is, the Bible teaches both that the earth is to last forever, and also that the earth is to be destroyed. As is always true with apparent conflicts in Scripture, however, the contradiction is only superficial. There is complete harmony when both biblical and scientific considerations are more carefully analyzed.

Such passages as the following speak of the eternal permanence of the earth and of the entire created universe:

And he built his sanctuary like high palaces, like the earth which he hath established for ever (Ps. 78:69).

Who laid the foundations of the earth, that it should not be removed for ever (Ps. 104:5).

Praise ye him, sun and moon: praise him, all ye stars of light. Praise him, ye heavens of heavens, and ye waters that be above the heavens. Let them praise the name of the Lord: for he commanded, and they were created. He hath also stablished them for ever and ever: he hath made a decree which shall not pass (Ps. 148:3–6).

One generation passeth away, and another generation cometh: but the earth abideth for ever (Eccles. 1:4).

And they that be wise shall shine as the brightness of the firmament; and they that turn many to righteousness as the stars for ever and ever (Dan. 12:3).

There are many other Scriptures to the same effect, but it should not surprise us that when God creates anything, it will endure forever. Otherwise, His purpose in creation would have been defeated, and that is impossible for the Creator.

I know that, whatsoever God doeth, it shall be for ever: nothing can be put to it, nor any thing taken from it: and God doeth it, that men should fear before him (Eccles. 3:14).

As far as the physical creation is concerned, its permanence has been confirmed by the most important and universal of all scientific laws. The first law of thermodynamics, or the law of conservation of matter and energy, states that the total amount of matter and energy stays constant with time. Nothing can be created, but neither can anything be annihilated. For the earth to be annihilated, it would require a miraculous intervention by the Creator to uncreate His creation! But He is the Creator, not the annihilator, so this He will never do.

The Destroyed Earth

But, then, what about such Scriptures as the following?

Heaven and earth shall pass away (Mark 13:31; Luke 21:33).

And I saw a great white throne, and him that sat on it, from whose face the earth and the heaven fled away; and there was found no place for them (Rev. 20:11).

But the day of the Lord will come as a thief in the night; in which the heavens shall pass away with a great noise, and the elements shall melt with fervent heat, the earth also and the works that are therein shall be burned up (2 Pet. 3:10).

The reconciliation of these two apparently contradictory teachings of the Scriptures is obvious when the relation of matter and energy is considered. The first law of thermodynamics states that it is the *totality* of matter and energy which is conserved. When matter is converted into energy (as per the Einstein equation $E = mc^2$, c being the velocity of light), matter is not annihilated, but merely transformed into other kinds of energy.

The marvelous prophecy of 2 Peter 3:10 possibly speaks of such a nuclear reaction on a gigantic scale, when the earth's "elements" will be "dissolved" (literally "unloosed" — 2 Pet. 3:12). Thus, although the earth did not *begin* with a "big bang," as evolutionist astronomers allege, it will indeed *end* (in its present form) with a big bang! There will be a *great noise* and *fervent heat*, as the elements of earth disintegrate in a great explosion, converted into tremendous sound and heat energy, with light and radiation as well!

The earth and its heaven (i.e., atmosphere) will thus “flee away” (Rev. 20:11). This, however, is not their annihilation, but their purification! The very “dust of the earth” — that is, the very elements out of which God formed all things, even man’s body, in the primeval week of creation — was placed under the great curse (Gen. 3:17) when man sinned. The sedimentary crust of the earth is also the burial ground of vast numbers of animals fossilized in the great Flood, not to mention the human and animal bones buried since the Flood. All this evidence of suffering and death and the curse must be purged out, and the only way to do this is by disintegration of the very elements themselves.

The Earth Renewed

But then God’s great creative power will be exercised once again, as in the original creation!

For, behold, I create new heavens and a new earth: and the former shall not be remembered, nor come to mind (Isa. 65:17).

Behold, I make all things new (Rev. 21:5).

Because the [creation] itself also shall be delivered from the bondage of decay into the glorious liberty of the children of God (Rom. 8:21).

Disintegration of the present earth, then, is soon to be followed by atomic integration of the new earth, as God causes the unleashed energy to reassemble into new material substances by His creative power. In the new (or, more literally, “renewed”) earth, there will be “no more curse” (Rev. 22:3), and everything in the creation will be “very good” once again (Gen. 1:31).

These will be the “times of [restoration] of all things” (Acts 3:21), and “there shall be no more death, neither sorrow, nor crying, neither shall there be any more pain: for the former things are passed away” (Rev. 21:4). All of God’s purposes in the first creation will finally be accomplished in the new creation, one that will never again be interrupted or polluted by sin and death. “We, according to his promise, look for new heavens and a new earth, wherein dwelleth righteousness” (2 Pet. 3:13). The new earth will last forever. “The new heavens and the new earth, which I will make, shall remain before me, saith the Lord” (Isa. 66:22).

The new earth will actually be, therefore, the *renewed* earth, the old earth made new again. There will be certain significant differences,

however. The first earth was suitable for human *probation*; the new earth is planned for full human *occupation*. Thus, in the primeval earth, there was a division between night and day (Gen. 1:4–5), but in the new earth, there will be “no night there” (Rev. 22:5). In the first earth, there was a division of land and sea (Gen. 1:9–10); in the coming earth, there will be “no more sea” (Rev. 21:1). That is, there will be human activity, everywhere and always, on the earth. “His servants will serve him” (Rev. 22:3).

Nor will this glorious service of the redeemed for their Savior need to be limited to the earth. Even though interstellar space travel will continue to be impossible in this present order of things (even the nearest star is four light-years away from the earth!), it will not be impossible in the future age. Our present bodies and all other physical systems are limited in movement by the ever-present gravitational and electromagnetic forces that govern their behavior. All believers will then, however, have new bodies that are spiritual bodies (1 Cor. 15:44), no longer subject to the constraints of these present forces, and, therefore, we will be able to fly throughout the universe unimpeded by gravity, lack of oxygen, or any other physical restriction of the present.

Yet these bodies will be as real and physical as was the body of Jesus Christ in His resurrection (Phil. 3:20–21). The resurrected Christ could move rapidly from earth to heaven and back again (John 20:17; Acts 1:9–11), could pass through closed doors (John 20:19), and yet was recognizable as in the same body He had possessed before His death and resurrection (John 20:27). He was capable of eating food (Luke 24:43), handling objects (Luke 24:30), and uttering speech (Matt. 28:19, 20); and our immortal bodies will be like His (1 John 3:2).

Perhaps it is appropriate, therefore, to look forward, in Christ, to exploring and developing God’s created universe extending into infinite space, throughout the ages continuing through eternal time. We can now only dimly see this wonderful life of the eternal future, and there is, no doubt, far more than we even dream of. One thing is certain, however! The infinite God who created the magnificent universe in which we live, surely has a glorious purpose in mind for those who were created in His image and whom He died to redeem. “But God, who is rich in mercy, for his great love wherewith he loved us, even when we were dead in sins, hath quickened us together with Christ, (by grace ye are saved;) and hath raised us up together, and made us sit together in heavenly places in Christ Jesus: That in the ages to come he might shew the exceeding riches of his grace in his kindness toward us, through Christ Jesus” (Eph. 2:4–7).

All of this, and no doubt far more, is promised in the future to those who have believed on Christ and have been redeemed by His shed blood and justified before God through His resurrection. “Eye has not seen, nor ear heard, neither have entered into the heart of man, the things which God hath prepared for them that love him” (1 Cor. 2:9). We can say, with the apostle Paul, that “the sufferings of this present time are not worthy to be compared with the glory which shall be revealed in us” (Rom. 8:18).

Christ's Final Coming

At Christmas, the Christian world rejoices in the glorious fact of the first coming of Christ, when “the Word was made flesh and dwelt [literally ‘tabernacled’] among us” (John 1:14), and when men “beheld his glory.”

But His tabernacling was for only a little while. He came down from heaven, and heaven was on earth, but earth would not receive her King, and the glory departed. “He that descended is the same also that ascended up far above all heavens, that he might fill all things” (Eph. 4:10).

The earth would not receive Him, but it was made by Him, and His people long for Him. “For the earnest expectation of the creation waiteth for the manifestation of the sons of God” (Rom. 8:19).

Therefore, there will be a second coming of Christ! “For the Lord himself shall descend from heaven with a shout, with the voice of the archangel, and with the trump of God: and the dead in Christ shall rise first: Then we which are alive and remain shall be caught up together with them in the clouds, to meet the Lord in the air: and so shall we ever be with the Lord” (1 Thess. 4:16–17).

But even that is not the end, and the earth will continue in travail, groaning in pain to be delivered. The nations in the four quarters of the earth must gather to battle against God one more time. He came down to them out of heaven, first in grace and patience, but this time it will be said that “fire came down from God out of heaven, and devoured them” (Rev. 20:9).

Finally, there will be a *third* coming of Christ — a *last* coming of Christ, this time with His Holy City — to the earth, made new in its fiery cleansing and now ready to serve eternally as the home of the glorified Christ, with all His saints.

“Behold, the tabernacle of God is with men, and he will dwell with them” (Rev. 21:3). This time His tabernacling among us will be forever, and His glory our unending light. We shall dwell with Him and serve Him in Immanuel’s land, world without end!

Does such a prospect seem unreal and far away? Just as His first coming was real, and His second coming is soon, so His last coming is sure! “Which hope we have as an anchor of the soul, both sure and steadfast” (Heb. 6:19).

That is the *real* world, the *eternal* world, for which we must prepare in this *present* world. As we look back to His first coming, we must also look forward to His final coming, for “when Christ, who is our life, shall appear, then shall ye also appear with him in glory” (Col. 3:4).

The Creationist Testimony in Heaven

An amazing scene appears before our eyes in the fourth chapter of the Book of Revelation. The throne of God is unveiled in the heavens, and around the throne appear four wonderful and mysterious beings. Because the Greek term is *zoon* (a word from which we derive such words as “zoology”), the King James translators called them simply “beasts”; other versions call them “living ones.” Their respective appearances are said to be those of a lion, a calf, a man and an eagle (Rev. 4:7), and this fact identifies them with the four mighty cherubim of Ezekiel 1:10 and 10:14.

Whenever these remarkable creatures are mentioned in the Bible, they are closely associated with the personal presence of God in His glory. But first of all they are encountered at the gates of Eden, with flaming swords keeping the way of the tree of life after the expulsion of Adam and Eve (Gen. 3:24) from the garden.

These are the highest creatures in all the angelic host of heaven. Once there were apparently five cherubim, and the highest of all, the “anointed cherub that covereth” (Ezek. 28:14), was none other than Satan himself. Until iniquity was found in him, this “covering cherub” had been perfect in all his ways. When he rebelled, however, he was “cast to the earth” (Ezek. 28:15–17). After his fall, though his ultimate doom was assured, his created eminence was still so exalted that even Michael the archangel dared not rebuke him directly (Jude 9). Therefore, the *unfallen* cherubim must be indescribably lofty and majestic!

It is these highest beings among all the heavenly “principalities and powers,” created originally by the eternal Son of God (Col. 1:16), whom the apostle John saw in his great revelation vision of the last days. There, around the throne in the heavens, John heard a great testimony of thanksgiving and praise, led by the cherubim themselves!

“And when those [cherubim] give glory and honor and thanks to him that sat on the throne . . . the four and twenty elders fall down before him . . . saying, Thou art worthy, O Lord, to receive glory and honor

and power: for thou hast created all things, and for thy pleasure they are and were created" (Rev. 4:9–11).

Whether or not the 24 elders represent all the redeemed men and women who will be in heaven, as most expositors believe, it is fitting for us even today to practice this great testimony of thanksgiving, anticipating the sure day to come when we will appear in His presence, where the cherubim dwell, and where they also give thanks to God! If the highest angels worship and rejoice as they thank God for His great creation, so should we.

Then, one day, when God's great curse on the creation, first occasioned because of the rebellious cherub Satan, is finally removed forever, the four faithful cherubim will swing open the gates of Eden once more, and there will be free access eternally to the tree of life (Rev. 2:7; 22:1–4) and to the presence of our Savior. And so,

Know ye that the Lord he is God: it is he that hath made us, and not we ourselves; we are his people, and the sheep of his pasture. Enter into his gates with thanksgiving, and into his courts with praise: be thankful unto him, and bless his name. For the Lord is good; his mercy is everlasting; and his truth endureth to all generations (Ps. 100:3–5).

Chapter 11

Creation Evangelism

It was shown in chapter 8 that true evangelism and missions are founded on creationism, as is the preaching of Christ and the gospel. That being so, it follows that a sound presentation of biblical creation, as supported by solid evidence in the sciences, is an effective means of preparing people to receive Christ as Savior and Lord, especially those who may be ignorant or skeptical concerning the Bible. This has been strongly confirmed in actual experience.

It is possible, of course, to persuade people to “come to Christ” by emotional appeals, with little understanding of creation or atonement or other basic Christian doctrines. Only God knows the hearts of professed converts, and He is fully sovereign in the means He uses to bring people to himself. The danger of emotional decisions, however, instead of intelligent and understanding decisions, is that they may often be shallow decisions that will not endure.

Christ’s parable of the sower is especially relevant here. This was His first recorded parable, and He indicated that this parable was basic to an understanding of His later parables (Mark 4:13). In the parable, the seed being sown was the Word of God (Luke 8:11), and it was to be sown in all types of ground — evidently meaning that God’s Word was to be proclaimed to all types of people.

It would only bear lasting fruit, however, in the lives of some — perhaps 25 percent — of those who would hear. Those whose minds and hearts were hardened, or whose knowledge was shallow or whose lives were cluttered with worldly concerns would be unfruitful. “Ground” that was hard or shallow or weed-infested would need first to be prepared before the seed could produce good fruit from it.

It would even be possible for a hearer to respond readily and joyfully — “immediately receive it with gladness,” Jesus said (Mark 4:16) — yet soon “fall away,” because they “have no root,” and so only “for a while believe” (Luke 8:13). They need to be “rooted and built up in [Christ as He is], and stablished in the faith” (Col. 2:7). They not only need to “believe,” but to believe the true gospel of the real Christ with genuine faith, all of which are founded first of all in the truth of real creation. They must not only believe, but they must know *what* to believe and *why*, if their “conversion” is to be real and lasting.

This is why the biblical examples of witnessing to the unsaved, especially as recorded in the Book of Acts, are so important for us to use in our own witnessing, not only in seeking to win the unsaved to Christ, but also in helping to establish young, doubtful believers in a solid and lasting faith.

The Liberating Gospel of Creation

The good news of a perfect, finished, recent creation often breaks in on the heart of a new or intellectually troubled believer like a breath of clean air. We hear this testimony over and over again from Christians who once were uncertain in their spiritual convictions and vacillating in their testimonies, not quite sure whether they could really believe what God has said in His Word. When suddenly they learned with certainty that the Bible is confirmed by all genuine science and can be confidently trusted in all things, it was nothing less than release from bondage!

To them, God is no longer a God of the long ago and faraway, but a God who is near, a very-present help, not far from every one of us. The world is no longer a decadent remnant of vast eons of grinding struggle and chance mutation, but, though fallen, is nevertheless a beautiful God-revealing world, everywhere bearing witness to the One who “did good, and gave us rain from heaven, and fruitful seasons, filling our hearts with food and gladness” (Acts 14:17).

It may be true, of course, that one who believes in a real creation will encounter some measure of opposition and ridicule, but that is nothing — not when compared with the wonderful freedom of knowing that God’s Word and God’s world are both true and are good for time and eternity. God is really *there!* And He *created* us, for himself!

Even the sorrows of the world become understandable, and therefore bearable. God, indeed, has cursed the ground, but even that was “for man’s sake” (Gen. 3:17). God so loved the world that He could not leave man to wander in despair forever, and so He uses (not *causes*) the discipline of suffering and the fear of death to show man his need of salvation.

And then, to realize that the same powerful God who created him is the gracious Savior who loved him and died for him, to finally realize *that* is immediately to bow in humble adoration and there proclaim: “My God, how great Thou art!”

Only the one who knows the Lord Jesus Christ as Creator and sustainer of all things (Col. 1:16–17) can begin to comprehend the majesty and magnitude of the peace that He made with “the blood of his cross, by him to reconcile all things unto himself” (Col. 1:20). Sensing His eternal purpose and His continued providential care for His wounded creation, we can thus know Him with real thanksgiving as Savior and Lord.

This is wondrous freedom — freedom not merely from the guilt of sin, but also freedom to enjoy God’s world, freedom from the need to compromise with man’s errant philosophies, freedom from lingering doubts as to the reality of those things that we profess to believe, freedom from fear lest God prove unable to perform what He has promised. “If the Son therefore shall make you free, ye shall be free indeed” (John 8:36)!

Creation and the Apostolic Witness

At the beginning of the Book of Acts, the Lord Jesus Christ gave His great command to His disciples: “Ye shall be witnesses unto me . . . unto the uttermost part of the earth” (Acts 1:8). The remainder of the Book of Acts tells how the first century believers attempted to obey His command, witnessing first in Jerusalem, then in all Judea, then in Samaria, and on throughout the world as far as they were able to go. Generation after generation of Christian witnesses have continued to try to fulfill His command, but it must be admitted that no generation has ever been so effective in doing this as was that first generation of Christ-believers.

Many reasons could be given for the remarkable spread of the gospel in the first century. One that has not been adequately considered by most modern-day witnesses, however, is the specific procedure followed by the early Christian evangelists and missionaries when they first encountered a new audience. That is, they always started preaching or witnessing at the level of faith and knowledge already possessed by their listeners, and then they went on from there to direct their hearers’ minds and hearts eventually to Christ, building on the specific foundation corresponding to the particular background of that audience.

The initial ministry was, of course, to the Jews, who already believed in God and in the inspiration and authority of the entire Old Testament. Therefore, Peter and the other evangelists always began by referring to the Scriptures, showing that Christ was indeed the fulfillment of the prophetic

Messianic promises (note Acts 2:16–21, 25–31, 34–36; 3:20–26; 4:10–12; 7:48–51; 8:30–36; 10:43; etc.). Continually using two powerful Christian evidences — namely, the fulfillment of Old Testament prophecy and the bodily resurrection of Jesus Christ — they were able to win great multitudes of their Jewish countrymen to faith in Christ as Savior and Lord.

Even when they began to go to the Gentiles, they would almost always begin at the local synagogue. There were colonies of Jews in almost every city, and, since these also believed the Old Testament, Paul and the other missionaries always began as they had back in Jerusalem, by reasoning out of the Scriptures (note Acts 13:5, 14–15, 32–40; 14:1; 17:2–3, 10–11; 18:4, 28; 19:8; etc.).

There are two recorded instances, however, where Paul found himself confronted by a crowd composed exclusively of pagan Gentiles. These people neither knew nor believed the Old Testament Scriptures, and it would have been futile to preach to them on the basis of a common acceptance of biblical revelation. Therefore, Paul began by referring to the evidence of creation, which they could see and appreciate entirely apart from Scripture.

In the first case, he was at Lystra, in Asia Minor, speaking to pagan worshippers of the Roman gods. To turn them away from these idols, he called their attention to the evidence of the true God in the creation. “We . . . preach unto you that ye should turn from these vanities unto the living God, which made heaven, and earth, and the sea, and all things that are therein: Who in times past suffered all nations to walk in their own ways. Nevertheless he left not himself without witness, in that he did good, and gave us rain from heaven, and fruitful seasons, filling our hearts with food and gladness” (Acts 14:15–17).

The other occasion was at Athens, in the midst of the Epicureans, the Stoics, and other evolutionary philosophers at Mars Hill. To them he preached as follows: “God that made the world and all things therein, seeing that he is Lord of heaven and earth, dwelleth not in temples made with hands: Neither is worshipped with men’s hands, as though he needed anything, seeing he giveth to all life, and breath, and all things; And hath made of one blood all nations of men for to dwell on all the face of the earth . . . that they should seek the Lord, if haply they might feel after him, and find him, though he be not far from every one of us” (Acts 17:24–27).

In neither case, of course, was the preaching of God as Creator sufficient to bring salvation. The message must not stop there, but it often must begin there. When an individual acknowledges God as Creator and

Sovereign, he is then fully able to understand his need of a Savior. But when one knowledgeably and specifically denies God as Creator, he can hardly be expected to kneel before Him as Savior and Lord.

The 20th century in North America is far removed in space and time from first century Jerusalem. Except for a fundamentalist minority, modern skepticism concerning the Scriptures is exceeded only by today's ignorance of the Scriptures. Especially among young people, years of indoctrination in evolutionary humanism have made them almost impossible to reach simply by the exposition of the Scriptures. Like the pagans at Lystra and the philosophers at Athens, they first must be made to see the majesty and love of the God of creation, and then perhaps they will listen to His Word and believe His promise of forgiveness of sin and salvation in the Lord Jesus Christ.

The Urgency of Real Gospel Preaching

On the flyleaf of the study Bible used by one of the writers has been affixed for many years the famous statement attributed to Martin Luther:

If I profess with the loudest voice and clearest expression every portion of the truth of God except precisely that little point which the world and the devil are at that moment attacking, I am not confessing Christ, however boldly I may be professing Christ. Where the battle rages, there the loyalty of the soldier is proved, and to be steady on all the battlefield besides is mere flight and disgrace if he flinches at that point.

Luther perhaps spoke even better than he knew, and his challenge has served the writers as a reminder and encouragement in times of opposition and discouragement again and again. Whether or not we like it, we *are* in a battle for the minds of men, especially the minds of our young people, and the enemy is brilliant in persuasion and mighty in influence. Souls by the millions hang in the balance, and "the god of this world hath blinded the minds of them which believe not, lest the light of the glorious gospel of Christ, who is the image of God, should shine unto them" (2 Cor. 4:4).

Unless they believe the glorious gospel, they are lost forever. "If our gospel be hid, it is hid to them that are lost" (2 Cor. 4:3). "With the heart man believeth unto righteousness" (Rom. 10:10), but how can the heart believe when the mind is blind? Saving faith is not an emotional, subjective credulity, but a confident conviction, based on facts and objective truth, a faith based on knowledge. "I *know* whom I have

believed,” asserted the apostle Paul, “and am *persuaded* that he is able to keep that which I have committed unto him against that day” (2 Tim. 1:12).

Satan, the age-long enemy of our King of creation, is the one “which deceiveth the whole world” (Rev. 12:9) and who, at the very end of the age, will still be able “to deceive the nations . . . [and] to gather them together to battle: the number of whom is as the sand of the sea” (Rev. 20:8). Yet, clever and powerful as Satan may be in his campaign to deceive and blind the minds of men, “greater is he that is in you, than he that is in the world” (1 John 4:4).

Satanic deception can be overcome only by divine truth, and the powers of darkness by the light, so the followers of Christ must know the truth and see the light — then preach the truth and send the light. “Thy word is truth,” and “the entrance of thy words giveth light” (John 17:17; Ps. 119:130).

It is the gospel that Satan has hid, because it is the gospel that is “the power of God unto salvation to everyone that believeth” (Rom. 1:16). It is, therefore, the gospel which must be preached “to every creature” (Mark 16:15).

But the gospel that is preached must be the true gospel, not “another gospel” (Gal. 1:6). It must be the complete gospel “according to the Scriptures” (1 Cor. 15:1, 3–4), not a one-third gospel or two-thirds gospel. As already demonstrated earlier in chapter 8, the true and whole gospel is founded on creation, empowered at the Cross, and centered on the coming Kingdom, embracing the past, present, and future work of the Lord Jesus Christ, the great King of creation!

And since the preaching of this saving gospel is bitterly resisted by the devil, it involves a real battle. Those who would preach the gospel are, therefore, soldiers of the King. And since creationism is the foundation of the gospel, its declaration must become the “cutting edge” of “the sword of the Spirit, which is the word of God” (Eph. 6:17). Especially those who wield this weapon as they proclaim the great truth of Christ as Creator are, so to speak, in the front ranks of those who would “endure hardness, as a good soldier of Jesus Christ” (2 Tim. 2:3).

Such a role in the battle is no place for those who are “at ease in Zion” (Amos 6:1), for those who love “the praise of men more than the praise of God” (John 12:43). But they are the ones who follow their King into the forefront of the battle, and “they that are with him are called, and chosen, and faithful” (Rev. 17:14).

The Proven Effectiveness of Creation Evangelism

Many evangelicals still decry the use of Christian evidences, especially as related to creation and earth history, because they think that those subjects are too controversial and will turn potential converts away. Being asked to believe things in the Bible that scientists have criticized, rejected, and even ridiculed will scare them away, they fear. So they tend either to compromise God's Word, by falling back on the day-age theory or the gap theory, for example, or else they simply urge the potential convert to ignore such issues (as they themselves tend to do).

We have already shown, however, that such compromises dishonor God and His Word. "Conversions" obtained by using such devices may well prove later to be shallow and ephemeral. Such fearful teachers are not going to satisfy the hard core evolutionary scientists and philosophers anyhow, for they will continue to insist on more compromises, stopping eventually at nothing but atheism or pantheism.

This compromising approach to evangelism has been followed by most Christians ever since the days of Charles Darwin and earlier, and it has not worked. The world of so-called Christendom is far less "Christian" today than at any time since the "great awakening" in colonial days. Schools that were founded to train men to preach the gospel (Harvard, Yale, etc.) are now hotbeds of skepticism and atheism. Great denominations that were once sound biblically and warmly evangelistic are now thoroughly liberal or neo-orthodox, and their denominational schools, colleges, and seminaries are citadels of unbelief and worldliness.

Ever since the Scopes' trial in particular (i.e., 1925), even evangelicals and fundamentalists have largely ignored these basic creation issues, piously concentrating on "personal Christianity" — nowadays on such shibboleths as "self-esteem," and other forms of what has come to be called "psycho babble." Even their Bible study groups tend to focus almost wholly on inter-personal relationships instead of biblical doctrine and God's great purposes in creation and redemption.

On the other hand, creation evangelism does *not* drive people away — just the opposite! Some 30 or more years of what we see as a "revival" of creationism have resulted in literally thousands of scientists becoming solid creationists and Bible-believing Christians, as well as perhaps millions of others. Nationwide polls have shown that almost half the population in this country believe in special, recent creation. The Scriptures themselves assure us that preaching about creation is consistent with the very witness of God himself concerning the powerful testimony implicit in His creation.

“The heavens declare the glory of God” (Ps. 19:1). “For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead; so that they are without excuse” (Rom. 1:20). “The living God, which made heaven, and earth, and the sea, and all things that are therein . . . left not himself without witness, in that he did good, and gave us rain from heaven, and fruitful seasons, filling our hearts with food and gladness” (Acts 14:15–17).

These and many other Scriptures unite in testimony to the spiritual impact of creationism. That is, the structure and processes of the created cosmos, properly understood and explained, bear irrefutable witness to the glory and power of God, as well as His grace and goodness — even His very nature, His godhead! This is as it should be, of course. There can be no conflict between the Creator and His creation, and the proper study of the natural world must direct men to the true God.

Unfortunately, the wrong study of nature — “science falsely so called” (1 Tim. 6:20) — has generated a serious dichotomy between cosmology and theology (“the study of the cosmos” and “the study of God”). The educational and scientific establishments today believe that there are irreconcilable conflicts between science and Scripture, between God’s world and God’s Word. Tragically, as noted above, the same attitude prevails in the religious establishment. Consequently, even many who theoretically believe in the verbal inspiration and scientific accuracy of Scripture often tend to downgrade doctrine and objective truth — especially topics related to science and history — in favor of subjective evangelism and an introspective emphasis on the spiritual life.

The Great Commission, however, enjoins Christians not only to “preach the gospel,” but also to teach “all things whatsoever I have commanded you” (Matt. 28:20). In fact, the very emphasis of the “everlasting gospel” is on the Creator of all things (Rev. 14:6–7). It is vital to preach the necessity of saving faith in Christ, who died for our sins, but it is essential to preach Christ as He is, not a Christ merely of one’s subjective experience. The Lord Jesus Christ is also Creator and sustainer of the universe (Col. 1:16–17), and He must be presented in His fullness! A religious experience based only on an emotional decision without roots in objective truth will “wither away” when “persecution ariseth because of the word” (Matt. 13:6, 20–21).

Because of the widespread belief that “science” has disproved Scripture, especially its accounts of creation, the Flood, and other great events of history, many Christians feel that they should avoid such “controversial”

questions in their witnessing. This tactic, of course, is virtually an admission to the unbeliever that the Scriptures, indeed, are mistaken on these matters, and therefore not really reliable at all.

But this is all wrong! The biblical records are completely true, and there is no need for compromise or equivocation. Furthermore, instead of hindering the presentation of Christ to an unsaved person, or impairing the spiritual growth of the Christian, the great truths of creationism, rightly expounded from both science and Scripture, will be found an invaluable foundation for true and courageous Christian faith and life.

The ICR Survey

In an attempt to evaluate this issue quantitatively, only a few years after it was formed in 1970, the Institute for Creation Research in 1976¹ conducted a mail survey among the readers of its monthly publication *Acts and Facts*, asking them to respond to a brief questionnaire, "Spiritual Values in ICR Ministry." They were asked to indicate whether the science-Bible ministries of ICR (lectures, debates, books, radio broadcasts, literature, etc.) had been of definite spiritual help to them in any of the following ways: (1) "Instrumental in leading us to Christ," (2) "Helpful in our personal spiritual growth as Christians," (3) "Effective in helping us win others to Christ," and (4) "Other." Comments were also invited.

The readers of *Acts and Facts* represent a large range of denominational backgrounds. Most are either college graduates or college students, so that the educational level is probably somewhat higher than among the public in general. A large number are pastors or Christian leaders of one sort or another. Therefore, the results of the survey should speak more cogently to this issue than a typical man-in-the-street poll.

More than 3,000 questionnaires were filled out and returned, an extremely high response! Almost half were accompanied by comments, some by long letters. The evangelistic effectiveness of the ICR ministry was clearly demonstrated by the fact that well over 100 people² indicated that it had been instrumental in leading them to Christ, while 900 or more said it had been effective in helping them to win others to Christ.

1 If anyone objects that a 1976 poll would not be valid today, we would only reply that the continuing growth of the creation movement the past 20 years indicates otherwise.

2 Some might think that 100 is not a very impressive total of converts, but it should be remembered that practically all readers of *Acts and Facts* were already Christians when they first requested the publication. (*Acts and Facts* is sent only to people requesting it.) A more significant result is the fact that almost a third of the readers themselves become more fruitful soul winners through use of the ICR materials.

As far as personal Christian life is concerned, almost 2,000 replies stated that the ICR ministry had been helpful in their own spiritual growth. There were 350 who indicated that it had helped them in various “Other” ways. Since normally only one questionnaire was returned for each family, all the above figures should be increased by some factor.

Perhaps of more interest than the numerical statistics are the comments. These were far too numerous to reproduce here, but typical comments appear below.

Genesis Flood instrumental in leading me to Christ. Conference at Bibletown in 1974 was a great blessing.

Although I am a Catholic, I commend you highly for the admirable defense of the Scriptures.

Instrumental in our seeing the possibility of God and rethinking our naturalistic presuppositions.

I was a hard-core skeptic.

As a scientist I would not have understood the reality of God and Christ if it weren't for ICR.

Your materials have helped me to gain assurance in the Word of God as authority for living a practical Christian life.

The ICR ministry has helped increase my faith more than any other work.

As a science teacher, I am very grateful for the information, which has opened my eyes.

Your ministry had a lot to do with winning my wife to Christ.

Really exciting. Praise the Lord for your work.

Before your information shattered my evolutionary beliefs, my chances of becoming a Christian were virtually nil.

“The Search for Noah's Ark” played a part in my conversion from atheism to Christ.

Belief in evolution is the main factor that prevents many persons from becoming Christians.

Apologetics is a very vital part of evangelism, and a must for building up Christians in the Lord.

I was saved in a church I was visiting, through the speaker's message on the Noahic Flood.

I passed your materials on to my (unsaved) husband, who was first outraged by your "biased" opinions — now he loves you!

The Genesis Flood broke the barrier (veil)!

Your message is clear — a Christ-centered life means salvation! Your work in creationism is wonderful.

This literature has helped some of my students to accept creation and to believe in Christ!

To a Christian biologist — ICR is as vital as any other gospel area, including Moody, Wycliffe, Billy Graham, etc.

I saw one science teacher come to Christ through this.

As a biological scientist (Ph.D.), I had almost overwhelming conflict with evolutionary "law" as taught in our universities. ICR has helped resolve this conflict.

I had been brainwashed by evolution while pursuing my biology degree, but have just finished reading *Scientific Creationism* and it was a real eye opener.

As a director for Child Evangelism Fellowship, I have found many opportunities to use the knowledge with young people personally, as well as with teachers.

People are generally astounded when they find there is scientific evidence supporting creationism. They are quicker to find a personal Savior who has suddenly become tangible.

I enjoyed the Santa Ana seminar immensely and use the scientific knowledge of creation I acquired in my witnessing regularly.

Tremendous witnessing tool, especially to the college student.

Especially helpful in the academic community in witnessing to other professional educators.

I regard your ministry, along with the Christian school movement, as the most valuable spiritual ministry today!

The issue of origins is an exceptional tool in apologetics and evangelism. A very vital ministry.

A debate with Morris and Gish — was the most refreshing thing which ever happened in my scientific study. It helped me to worship God through what He has made.

My opportunities to witness for Christ in a public classroom setting have increased from practically nothing to a common occurrence.

Started out totally brainwashed in evolution . . . now use the material in my own teaching . . . virtually all in my classes have become creationists.

This has helped me to realize the truth of God's Word. I am soon to enter a Russian Orthodox monastery.

I doubted the Bible as being true until ICR. One year later I was born again!

One student was led to Christ by Morris's *Bible and Modern Science*.

Dennis was a boy in our youth group to whom my husband made available several of his ICR books and Impact Series. As a result of this . . . we have watched Dennis grow into an enlightened and bold witness . . . He has led friends to Christ.

I am a science teacher and find everything you write helpful to me personally.

As an airline pilot, it has been used tremendously.

Dr. Morris's book *The Bible and Modern Science* was very instrumental in my conversion.

Accepted Christ as a result of your weekend seminar in Philadelphia.

Dr. Gish's book *Evolution: The Fossils Say No* helped give a confused young man faith to trust Scripture.

His reading of Dr. Morris's books led him, occupied by geology, to Christ.

A friend of mine committed his life to Christ as a result of Dr. Morris's book *Scientific Creationism*.

The ICR is an answer to prayer.

I as a science teacher have seen that students must see Christ as Creator before they will ever see Him as a "Purpose Giver."

I was turned away from the Scriptures as a high school freshman when I was taught evolution.

The work of ICR is so essential that it would be a great loss if it would ever be curtailed.

Have seen many young believers greatly strengthened by use of your materials. One young man decided to go into the ministry.

Helped me to accept the Bible as the Word of God.

Words do not express the worth of *Acts and Facts* to our spiritual encouragement.

You are doing what organized religions have failed to do.

I have just completed a 13-week course using Dr. Morris's tapes, and it was a pleasure to see the growth in the lives of those participating.

I am 63 years of age. Thank God and you, I've had the privilege to live to see this *great, important* ministry, finally. (From a foreign missionary.)

This has given me a much stronger testimony to the saving power of Jesus Christ.

ICR — one of the all-time great events of Christian Bible history.

The Genesis Flood is the most exciting book (next to the Bible) I have ever read.

I have found that after they digest scientific creationism they are very open to witnessing.

My wife and I work with Campus Crusade for Christ, and are so grateful for your dedication to this ministry.

Reading the ICR publications has had a great deal to do with my being a convinced follower of Christ. I have found it very helpful in my preaching and teaching ministry in the church.

This material has been invaluable in my teaching and preaching ministry.

Four years ago Dr. Gish and Dr. Morris were on the campus at Oklahoma University. I attended on a lark and was amazed. . . . God used that debate and subsequent material to change the direction and course of my entire life and ministry. (From a Methodist pastor.)

I personally have had my own Christian life deepened and strengthened through the various ministries of ICR.

Acts and Facts has enriched my life this year and added to my love for God's Word.

I really appreciate your weekly radio broadcast. I just wish it were longer.

I was a trained evolutionist, and I went to hear Dr. Morris fall on his face. He didn't — instead I fell to my knees.

The above comments are only a very small sampling of all the encouraging testimonies then received. There could no longer be any doubt that a creationist ministry does have an exceedingly significant and God-glorifying spiritual impact on the lives of thousands.

In contrast, there were 25 replies that were negative or critical in one way or another. Most of these were from non-Christians whose names were on the mailing list inadvertently. (ICR adds names to its mailing list only by request, but occasionally people will sign requests for friends, to whom they wish to send *Acts and Facts* without obtaining their friends' consent.)

Some might feel that the poll was biased in that the questionnaire went only to people already interested in creationism. As a matter of fact, this makes it all the more significant. That is, these are the people best qualified, in terms of knowledge and experience, to make an intelligent appraisal of the spiritual impact of creationism. Those who have not “tried it” are hardly able to evaluate it!

Although no similar survey has been taken in more recent years (the ICR mailing list has grown too large!), many similar testimonies are continually being received, both in person at meetings, or in the mail. Some of these have been published from time to time in the ICR newsletter, *Acts and Facts*, and more are received almost every day at the ICR offices or from personal contacts at ICR meetings.

It is now evident, both from Scripture and from experience, that scientific biblical creationism can and should play a vital role in evangelism and in Christian faith and life, as well as in true science and education. It is especially important when dealing with those who have been educated in public schools and colleges in recent decades.

In no way does this conclusion minimize the importance of prayer and the Bible in witnessing, or of the need for faith and the work of the Holy Spirit in regeneration. It is not “either–or,” but “both–and.” It is a matter of being ready to “give an answer to every man” (1 Peter 3:15), as need and opportunity arise and as God has commanded.

The Battle for Creation

The aggressive promotion of creation evangelism, not only by ICR but also by many other creationist organizations that have been formed³ in recent years, has led to much organized opposition by the evolutionary establishment in science, education and the media. The slanderous charges that have been publicized widely by such secular efforts have also caused many liberal and even evangelical religionists to oppose the creation revival, although these latter groups tend to focus their opposition more directly at what they call “young earth” creationism, still wistfully hoping that they can gain a measure of approval for their “progressive creationism” or “theistic evolutionism” from the establishment intellectuals.

The public schools have become a special battleground in this conflict. That is understandable, in view of the pervasive dominance of evolutionary humanism in the curricula, courses and textbooks used throughout the national school system, from kindergarten through graduate school. This

3 In the Henry M. Morris' book *History of Modern Creationism* (San Diego, CA: Institute for Creation Research, 1993) are listed the names and addresses of over 100 such organizations (p. 403–410). There are probably many others not listed.

control is so complete that attempts to introduce creationism into public institutions have generated such active opposition as to increase still further the stranglehold that evolutionism has upon education.

Christians are, therefore, of necessity relying more and more on private Christian schools and home schools, in order for their young people to be educated in a creationist frame of reference. The public institutions have become essentially a humanistic mission field, as fully pagan as nations and tribes long committed to evolutionary pantheism.

But what about those millions of young people being indoctrinated in evolutionary humanism? How are they to be reached for Christ? The answer has to be through biblical methods of evangelism, carried on by churches and individual Bible-believing Christian men and women. These young people for the most part are as ignorant and skeptical about the Bible and biblical Christianity as those in foreign lands who have never heard the gospel at all.

It would seem obvious that biblical evangelism — which especially includes creation evangelism in most such cases — must be central in the methods employed by concerned Christians and churches. This is surely more effective than either trying to force the issue in the courts or by the fun-and-games approach that so many churches seem resigned to.

For though we walk in the flesh, we do not war after the flesh: (For the weapons of our warfare are not carnal, but mighty through God to the pulling down of strong holds;) Casting down imaginations, and every high thing that exalteth itself against the knowledge of God, and bringing into captivity every thought to the obedience of Christ (2 Cor. 10:3–5).

Christians are, indeed, involved in warfare, and the objectives in the conflict are the minds and hearts of men. Conflict, of course, is difficult, and sometimes the tension and weariness of the battle may influence one's judgment. Often we are tempted to "fight fire with fire," using the same weapons and tactics as the enemy, but this is a dangerous mistake. Perhaps even more often we are tempted by the great (and even demonic) forces that are arrayed against us to retreat, or to compromise, or even to surrender, and this is a *fatal* mistake! In the face of the first temptation, we always need to remember that the *weapons of our warfare are not carnal*; and, in the face of the second, that they are *mighty through God to the pulling down of strong holds*.

As already emphasized, the Christian warfare involves all aspects of the preaching and implementation of the gospel, in all of its aspects

throughout the world. The “cutting edge” of the “everlasting gospel” (Rev. 14:6–7) is the great truth of special creation, with the exhortation to worship the Creator of all things. The creationist witness is thus in the very forefront of the battle. He is the one who is most directly subject to accommodationist and defeatist temptations and who, therefore, needs especially to keep these admonitions of the Apostle constantly before Him.

The Law, the Schools, and the Christian

The weapons of our warfare are *not* carnal weapons! We should, therefore, never even consider attempting to use the police power of the state (with its apparatus of fines, imprisonments, and, ultimately, even military might and the power of life and death) in enforcement of either the gospel in general or of creationism in particular. Some “Christian” governments have attempted this sort of thing in the past, and the results have always been destructive of *both* church and state. The biblical teaching is that education is to be controlled only by the home and the church. It is tragic when Christians have allowed governments to usurp control over education at all, but it is doubly tragic whenever Christians have tried to *use* the state to control education.

The biblical purpose of nations and governments is essentially to protect the lives and liberties and properties of their people, particularly to maintain conditions that will enable their citizens to freely seek God and worship Him (Acts 17:24–27; 1 Tim. 2:1–4). As *citizens*, we have the right and obligation to do all that we can to establish and maintain governmental structures that accomplish these divinely ordained functions of government. As Christians, however, we also have the obligation — through our homes and churches, not through government — to provide a sound, creation-based education for our young people. This latter obligation involves the establishment and support of true Bible-centered Christian schools and colleges, as well as home schools, and rejection of all attempts by governmental or other secular organizations to influence their curricula.

But what about tax-supported schools and other secular educational institutions and organizations? These obviously constitute a very important component of modern society, influencing the minds and destinies of millions of young people, even though — biblically speaking — they are not really *true* schools at all. They are all structured within the false framework of evolutionary humanism, rather than the true framework of theistic creationism. Since they have been established under government control, and since this was not the intention of God when He established

the institution of human government in the first place, it is not surprising that such schools have departed so far away from God's truth in their teachings.

As far as the Christian creationist is concerned, therefore, the modern secular school or college is, like every other organization of human invention, essentially only a community of people who *need* the gospel. It is, like every other part of God's world, a mission field, and its inhabitants should be permitted and encouraged by their government to "seek the Lord, if haply they might feel after him, and find him" (Acts 17:27).

In no way does this suggest an *establishment* of religion, however, but only *freedom* of religion. This, of course, is exactly the purpose intended by the "founding fathers" of our own government when they framed the United States Constitution. Sad to say, that high purpose has been, in recent years, largely subverted and distorted by ill-advised legislation, devious judicial constructions, and authoritarian administrative interpretation and regulation. Therefore, the public school system has become not only a mission field, but also a battlefield!

And how do we fight the battle? Well, certainly not with the carnal weapons of legislation, judicial decision, or administrative regulation! To *require* that the gospel be taught in public schools (even biblical creationism, which is the cutting edge of the gospel) is to call on the police power of the state to do something that God did not establish the state to do. How can God bless and prosper that which contravenes His will?

It is not surprising, therefore, that the many attempts in recent years by Christian creationists to get the teaching of creationism mandated by legislation or jurisprudence have all been notably unsuccessful. Well-meaning Christians, with high motives and seemingly persuasive logic, have filed lawsuits in many places and gotten legislation introduced in many assemblies, to no avail. Furthermore, each new courtroom defeat or legislative rebuff sets another precedent that makes it all the more difficult to get creation back into the schools anywhere.

But supposing that such an attempt *were* successful, how could it be enforced? Would every teacher be compelled to teach the gospel (remember, biblical creationism *is* a part of the gospel!) even when he did not believe it, on penalty of losing his job, or worse? If he did teach it under these conditions, wouldn't his teaching very likely (perhaps even unintentionally) be a caricature of true creationism, thereby doing more harm than good? Or, to prevent this hypocrisy from happening, would there not have to be a continual monitoring process, manned by multitudes of

parents or other concerned citizens? And wouldn't this constant interference turn the educational system into chaos?

This is why the Institute for Creation Research, from its very beginning, has discouraged attempts by well-meaning creationists to *force* the teaching of scientific creationism in the public schools, even though a large part of ICR's efforts have been directed toward the *promotion* of creationist teaching in the schools.

With all these considerations in view, it seems highly doubtful that we should try to use such worldly weapons as these to *mandate* the teaching of creationism. On the other hand, it is not only feasible, but fully consistent with God's purposes, to do all that we can to *encourage* the teaching of creationism.

The real weapons of the Christian warfare are spiritual weapons, not carnal. The armor of the Christian, for example (see Eph. 6:13–17), consists of truth, righteousness, peace, faith, and salvation, with the Word of God (Eph. 6:17) as his *offensive* weapon. These weapons are to be used to “preach the gospel” (Mark 16:15) and in “teaching them to observe all things whatsoever I have commanded you” (Matt. 28:20).

Now, since the public school is essentially a mission field in which the gospel needs to be preached, and since scientific creationism can well be regarded as the cutting edge of the sword of the Spirit with which we are to preach the gospel, and since God's purpose for human governments primarily involves maintenance of an environmental climate in which the true Creator God can be found and known, we are well within God's will when we do what we can to persuade the government to *allow* and *encourage* the teaching of creationism in all its institutions, even though it is wrong to try to *force* the government to *require* it.

The one biblical example of a Christian going to law is the case when the apostle Paul exercised his special rights as a Roman citizen not to be “examined” by scourging (Acts 22:24–29) and then, later, to appeal to be tried by the Roman emperor instead of by the Jews (Acts 25:7–12; 26:32). This was obviously a defensive situation, and does not in any way justify a Christian legal action to force the teaching of creationism. However, it could well justify defensive legal action in situations where the state has acted to interfere (contrarily to the implications of God's primeval mandate to the nations) with either the proper education of children from God-fearing homes in private schools or home schools, or with the non-sectarian and non-enforced teaching of theism and the gospel (particularly in its foundational aspect of scientific creationism) in public schools.

Christian creationists should do all that they can to inform, encourage, and persuade school boards, school administrators, and teachers to teach scientific creationism as at least a scientific alternative to evolution. The same is true of college and university administrators and faculty members, of museum curators, of communications' media editors, and others who influence what students and the general public learn. This approach also means informing pastors and other Christians, as well as community leaders in general, concerning the importance of the issue and the scientific and sociological case for creationism.

All of this should be done, not in an attitude of belligerence or compulsion, but of gracious persuasion, remembering that the battle is spiritual, not political. "And the servant of the Lord must not strive; but be gentle unto all men, apt to teach, patient, In meekness instructing those that oppose themselves; if God peradventure will give them repentance to the acknowledging of the truth; And that they may recover themselves out of the snare of the devil, who are taken captive by him at his will" (2 Tim. 2:24–26). Furthermore, all should be done in the assurance that the efforts have been preceded and accompanied by prayer for God's leading and enablement. "Beloved, if our heart condemn us not, then have we confidence toward God. And whatsoever we ask, we receive of him, because we keep his commandments, and do those things that are pleasing in his sight" (1 John 3:21–22).

As the old hymn reminds us: "Stand up, stand up for Jesus: stand in His strength alone. The arm of flesh will fail you; ye dare not trust your own." The weapons of *our* warfare are not carnal weapons; we do *not* war after the flesh! We tend to become impatient, however, wanting victory *now*. This desire often tempts us to resort to the methods that seem to produce results quickly for the unspiritual causes of worldly organizations. We engage in high pressure advertising and fund-raising; we use emotionalism to try to generate large, enthusiastic crowds; we commit our limited resources to techniques with visibility and quick audience appeal; we preach an easy, diluted "gospel" in hope of achieving many "decisions." Perhaps, worst of all, we try to engage the police power of the state to *compel* the teaching of the gospel to its citizens.

But all these are carnal (that is, "fleshly") weapons, and can accomplish only carnal results. If we wish to win real, God-approved victories in a spiritual battle, we must use our spiritual weapons, and we must be willing to allow God to work in His own time. "So then neither is he that planteth any thing, neither he that watereth; but God that giveth the increase," (1 Cor. 3:7). "Cast not away therefore your confidence, which

hath great recompense of reward. For ye have need of patience, that, after ye have done the will of God, ye might receive the promise” (Heb. 10:35–36). And God *does* give the increase! Although our weapons are not carnal, they are “mighty through God to the pulling down of strong holds” (2 Cor. 10:4).

From our perspective, having been actively engaged in this “battle for creation” for over 50 years, it already seems that great and mighty victories have been won — and they have all been won without the use of the carnal and unspiritual weapons noted above.

The real weapons of the believing, diligent, praying creationist Christian are far more potent than the legislature and the judiciary, than Madison Avenue and the media, or even than swords or guns. They are, indeed, “mighty through God to the pulling down of strong holds.” There is no need for discouragement or impatience!

Those who oppose God and His truth may prosper for a time, but His truth will eventually prevail. “Commit thy way unto the Lord; trust also in him; and he shall bring it to pass. . . . Cease from anger, and forsake wrath: fret not thyself in any wise to do evil. . . . For yet a little while, and the wicked shall not be. . . . But the meek shall inherit the earth; and shall delight themselves in the abundance of peace” (Ps. 37:5–11). “These shall make war with the Lamb, and the Lamb shall overcome them: for he is Lord of lords, and King of kings: and they that are with him are called, and chosen, and faithful” (Rev. 17:14).

Outcome of the Battle

The King James translation puts it this way: “Casting down imaginations, and every high thing that exalteth itself against the knowledge of God, and bringing into captivity every thought to the obedience of Christ” (2 Cor. 10:5). These are the “strongholds” that the weapons of our warfare are “pulling down.”

The word “imaginations” means “reasonings,” and “thought” is the same word as “mind” in the Greek. It is, therefore, legitimate and appropriate to paraphrase this promise somewhat as follows: “The genuine spiritual weapons which you use (that is, as enjoined in Eph. 6:13–17, the weapons of truth and righteousness, faith and peace, salvation and the Word of God) will certainly defeat the intellectual reasonings and proud scientism that would oppose the knowledge of the true Creator-God, finally bringing the mind of every man into willing submission to Christ.”

Therefore, we are on the winning side in the battle for the mind, as surely as the world exists! Satan has “blinded” many minds (2 Cor. 4:4) for a little while, but one day “the devil that deceived them” will be “cast

into the lake of fire” (Rev. 20:10). In confidence of God’s truth and in assurance of that day, we even now are active in the battle, proclaiming the complete and wonderful true gospel of creation and redemption and the eternal kingship of Jesus Christ, seeking to win the mind of every person to obedient faith in Him.

Chapter 12

Bypaths in Creationland

In the first 11 chapters we have surveyed the basic biblical teachings concerning creation. The theme of creation is so rich, however, and so vital, that one can also explore many intriguing vistas of insights into the beauties of God's plan and the designs in God's Word in relation to His world. After the fairly heavy going in the earlier chapters as we sought to establish the basic structure of biblical creationism, it seems good to end the book with just a few of these fascinating bypaths in "creationland."

The Faith of Noah

One of the most rewarding aspects of the study of the early chapters of human history has always been the story of Noah. The Scriptures speak of "giants in the earth in those days" (Gen. 6:4), and these were not only giants in physical stature, but giants in wickedness. "The earth also was corrupt before God, and the earth was filled with violence" (Gen. 6:11).

But Noah was also a giant — a *spiritual* giant! "Noah was a just man and perfect in his generations, and Noah walked with God" (Gen. 6:9).

Neither Satan nor Adam had believed the Word of their Creator, and, therefore, they rebelled against His Word and disobeyed His Word. The result was Satan's expulsion from heaven and Adam's expulsion from Eden. Sin came into the world, and death by sin. There finally came a time when the world was filled to the brim with unbelief and wickedness, and no one but Noah heeded any more the words of its King.

Christ said (Luke 17:26) that the last days before His coming would be like Noah's days. As we confront the secularized world of our generation, we can profit much by studying and emulating Noah's example in his generation. Consider the following:

1. First of all, “Noah found grace in the eyes of the Lord” (Gen. 6:8). This is the first mention of *grace* in the Bible. Before anyone can expect to be used by God in *this* generation, as in *that* generation, he must first be the recipient of God’s saving grace, entering into the family of God through faith in the Savior, Jesus Christ. Such faith is, basically, simply a firm trust that what God says is true, and what He promises, He will do. In Noah’s case, as in the case of every true believer who has exercised saving faith through the ages, such faith is warranted by virtue of the simple fact that God is the Sovereign Creator!
2. Twice it is stated (Gen. 6:22; 7:5) that “Noah did according to *all* that God commanded him.” When God’s Word directed him to build an immense boat, he proceeded to build it according to the exact instruction; when the Word told him to take two of every kind of land animal into the boat, that he did. By any measure of the science and experience of his day, such actions were altogether foolish, but Noah believed and obeyed God’s Word. In our day, we are ill-advised if we try to pick and choose among the Scriptures, believing only those portions that seem acceptable to current human experience and scientific philosophy. We must live today also “by *every* word of God” if we are to win victory over the devil (Luke 4:4).
3. Noah had to confront the uniformitarians of his day, as we do in ours. The meteorologists had never seen rain at all (Gen. 2:5) and the hydrologists knew nothing of even a local flood, let alone a worldwide flood. The geologists knew where to find metals and precious stones (Gen. 2:12), but it is unlikely that they had ever seen any fossils or earth movements. Nevertheless, Noah believed and preached God’s Word, though his “model” of coming catastrophism was so contrary to common scientific experience that he never gained any followers. He, “being warned of God of things not seen as yet” (Heb. 11:7), simply continued to pattern his preaching and practice after God’s precepts. And so should we.
4. Though Noah gained few (none, so far as the record goes) converts in the world, his faithfulness did at least result in the saving of his own household. “Come thou and all thy house into

the ark; for thee have I seen righteous before me in this generation" (Gen. 7:1). "He prepared an ark to the saving of his house" (Heb. 11:7). Christian parents today are rightly exercised about the ungodly influences of the world — especially the educational system and the media of communication — on their own children. The easy way is to drift, to compromise, to seek worldly advantage and recognition for them. But this is the sure way to lose them! The way to save them is, like Noah, to stand strong, to preach righteousness, to pray much, to work hard, to believe and obey God's Word in all its fullness and simplicity.

Of all the great men and women of faith catalogued in the famous "faith chapter" (Heb. 11), Noah's description stands out like a beacon, being the only one that both begins and ends with the phrase "by faith" (Heb. 11:7). Noah's tremendous faith in the Word of his Creator God and in its saving power is an incomparable example for believers today!

Modern subjectivist Christianity often emphasizes the importance of "faith," and the Bible does teach that faith is essential for salvation. But saving faith is not merely an emotion. Faith must have an object, and saving faith must have an object with the ability to save. It is significant that the very first object of faith mentioned in the "faith chapter" is the fact of special creation (Heb. 11:3) by the Word of God. Noah believed that his Creator God was telling the truth, and therefore he obeyed His instructions. Consequently, he and his family were saved through the judgment of the great Flood.

It is no different today. We are saved, like Noah, by grace, through faith — faith in the trustworthy Word of the One who created us and who alone provides salvation.

The Host of Heaven

The host of heaven cannot be numbered (Jer. 33:22).

Man has always been intrigued and fascinated by the heavens. The scholars of antiquity, whether in Sumer, Egypt, China, Mexico, or any of the other early civilizations, were well educated in the locations and orbits of all the visible stars. They had counted and cataloged and grouped them all and had pronounced the total number to be less than five thousand!

But the Holy Scriptures were far ahead of these ancient scientists. According to the Bible, the stars are as great in number as the sands of the

seashore (Gen. 22:17) and simply cannot be numbered! The vast reaches of the heavenly spaces were — and are — utterly incomprehensible to man. “For as the heavens are higher than the earth, so are my ways higher than your ways, and my thoughts than your thoughts” (Isa. 55:9).

The giant telescopes of the present day have only begun to reveal the immense numbers and fantastic variety of the stars. With literally billions of galaxies, and billions of stars in every galaxy, the number of the stars seems to increase almost without limit. The variety is equally amazing — red giants, white dwarfs, Cepheid variables, neutron stars, pulsars, and on and on! As the Bible says in an incisive foregleam of modern astronomy: “There is one glory of the sun, and another glory of the moon, and another glory of the stars: for one star differeth from another star in glory” (1 Cor. 15:41). This remarkable fact is confirmed by the familiar H-R Diagram in astronomy, showing each star’s temperature versus its brightness. Each of the innumerable stars plots at a different point on the diagram!

The creation model must attempt to explain the various aspects of the universe, not in terms of evolutionary development (for this model assumes that they did not evolve at all, but were created), but rather in terms of creative purpose. This is no small task in view of the infinite variety of stellar systems, but it is no more difficult, nor less susceptible to empirical test, than imaginary evolutionary explanations for the same things.

Why, for example, is the universe so big, and why are there so many different kinds of stars and galaxies and interstellar phenomena? Why are the moon and the other planets barren of life? What is the purpose of pulsars and quasars? And so on. It is obviously much easier to *raise* such questions than to *answer* them, whether in terms of evolutionary mechanisms or of creative purposes.

We can see a number of reasons for the *visible* stars at least. They are useful for light, for navigation, and for chronology. They are a source of beauty and inspiration for mankind. Furthermore, every new discovery in the stellar heavens adds that much more to our amazement at the vastness of power and variety in the creation! “The heavens declare the glory of God; and the firmament sheweth his handiwork” (Ps. 19:1). Surely, the enlargement of our appreciation and adoration of Him is a worthwhile purpose for the stars.

The barrenness of the moon and planets, as well as the intense heat of the stars, emphasizes the biblical teaching that “the heavens are the Lord’s, but the earth hath he given to the children of men” (Ps. 115:16).

UFO enthusiasts to the contrary notwithstanding, there is no evidence, either in science or Scripture, that biological life exists elsewhere in the universe. Life was created specifically for the earth, and the earth for life. Of all other bodies in the universe, the moon would be expected to have most nearly the same (evolutionary) origin as the earth, but the lunar explorations have conclusively eliminated such a notion.

The same situation apparently exists with respect to all the other planets in the solar system.

Therefore, the earth is unique in the solar system and, for all we know, the solar system is unique in the universe. So far as we can *observe*, there are not even any planets anywhere else, let alone a planet equipped to sustain biological life. And even if there were, with even the nearest star being four light-years distant, presently there is no rational possibility of our ever being able to communicate with such hypothetical space “people” on such hypothetical planets.

Amazing though it may seem to evolutionary naturalists, the evidence favors the conclusion that man is unique in the universe, and, furthermore, that he is the apex, not of the evolutionary process, but of God’s creative purposes! Even the galaxies, therefore, are inferior to man. Isaac Asimov, certainly not a creationist, has nevertheless recognized this fact.

In man is a three-pound brain which, as far as we know, is the most complex and orderly arrangement of matter in the universe.¹

The physical universe of space and time — and all the phenomena of energy and matter and life that occur in space and time — must somehow be related to man and to God’s purpose for man. In the present economy of things, however, man is inescapably confined to only a tiny corner of the vast universe. The fulfillment of the Creator’s purposes for man in the universe (and they *will* be fulfilled, since an omnipotent and omniscient God, by definition, cannot fail in His purposes) must therefore await the establishment of a new economy of things in an age to come.

In the meantime, there is still another “host of heaven,” described in the Bible as an “innumerable company of angels” (Heb. 12:22). The frequent identification of angels with stars in the Bible (note Job 38:7, Rev. 12:4, and many other passages) is most intriguing, especially in

¹ Isaac Asimov: “In the Game of Energy and Thermodynamics You Can’t Even Break Even,” *Smithsonian Institute Journal* (June 1970), p. 10.

view of the fact that there is no obvious similarity between angels and stars!

The same mysterious correlations are found everywhere in ancient mythology. The gods and goddesses (Jupiter, Venus, Orion, etc.) were identified with various stars, planets, and constellations. The age-long influence of astrology, even on people of intelligence and educated culture, is another strange phenomenon. And now, in an almost unbelievable return to those ancient pagan mysteries, modern scientific speculations about the evolution of life in other worlds have been transmuted into a weird celestial drama of ancient astronauts, flying saucers, little green men, and “chariots of the gods.”

The reality behind all these “fearful sights and great signs . . . from heaven” (Luke 21:11) can only be that there really is life in outer space! But these living inhabitants of the heavenly bodies are neither supermen in spaceships nor blobs of protoplasm in various stages of evolution. They are, rather, “angels, that excel in strength” (Ps. 103:20), “ministering spirits, sent forth to minister for them who shall be heirs of salvation” (Heb. 1:14) — none other than God’s holy angels. There exists also in the heavens a vast horde of rebel angels, following “that old serpent, called the devil, and Satan, which deceiveth the whole world” (Rev. 12:9).

These are all real beings, living a real existence in this real physical cosmos. However, they are spiritual beings, not physical, and, therefore, are not constrained by the gravitational and electromagnetic forces which control bodies formed of chemical elements. On occasion, however, the faithful angels have been known to have power to “materialize” themselves in human form (Heb. 13:2) — and the fallen angels, or demons, to “possess” human or animal bodies (Matt. 8:28–32).

Thus, there is a host of stars without number in the heavens and also an innumerable angelic host of heaven. The latter may well inhabit the former and are thus, in both Scripture and mythology, intimately interrelated.

But if only angels can ever reach the stars, why has God placed such a strange fascination and yearning for the heavens in the heart of man? Jesus answers: “For in the resurrection they . . . are as the angels of God in heaven” (Matt. 22:30). To the prophet Daniel, the angel said: “And many of them that sleep in the dust of the earth shall awake, some to everlasting life, and some to shame and everlasting contempt. And they that be wise shall shine as the brightness of the firmament, and they that turn many to righteousness *as the stars for ever and ever*” (Dan. 12:2–3).

In glorified resurrection bodies, unfettered by gravity, the redeemed of the Lord will then have an eternity of time to explore the infinitude of space! Though the renewed earth will still be his home, man will finally reach the stars.

The Heat of the Sun

There is nothing hid from the heat thereof (Ps. 19:6).

In its illuminating insight into the fundamental lessons of cosmology, we shall find the 19th Psalm to be one of the most remarkable chapters in all the Bible. The theme of this passage is God's revelation to man, and man's response to that revelation. The first six verses of the Psalm deal with God's revelation in the cosmos itself, and with man's failure to meet God's standard as revealed therein. The last eight verses speak of God's revelation in Scripture and man's appropriation of cleansing and redemption through the written Word.

The Word in the World

In the first section of Psalm 19 is found a striking description of the nature and purpose of the created cosmos. Here we learn that God is indeed revealed in the world that He has created, but that somehow man in his blindness fails to read that revelation rightly. Therefore, he must have the written Word if he is properly to understand the nature of the universe.

Verse 1. "The heavens declare the glory of God; and the firmament sheweth his handiwork."

This verse clearly refers us back to the creation chapter, Genesis 1. The "heavens" include both the starry heavens (Gen. 1:1; 2:1) and the particular heaven associated with the "firmament" (Gen. 1:8). The "firmament" (meaning *expanse*, or *thinness*, or more simply, just "*space*") may refer either to the atmospheric heaven in which birds fly (Gen. 1:20) or the stellar heaven, in which the sun, moon and stars appear (Gen. 1:14–16).

"Heavens" and "firmament" are, thus, essentially synonymous, and Psalm 19:1 is an example of Hebrew poetic parallelism. We can perhaps best express the thought of each word in modern scientific terminology by the word "space." Any of the three terms can be used in either the generic sense — that is, space as one of the three fundamental entities in the space/mass/time continuum that constitutes our physical universe — or in a specific sense, as a particular space, such as the earth's atmosphere or the inter-stellar regions.

Thus, we can read that space, as the basic backdrop, as it were, of the universe has been created in order that the phenomena of matter and energy, constituting the processes that operate in the universe against that backdrop, may be seen and comprehended by man. The heavens “declare” — that is, “set forth in orderly categories, expound” — and the firmament “sheweth” — that is, “shows forth, displays.” Thus, the universe is an orderly system, a *cosmos*, rather than an unreliable and incomprehensible *chaos*.

Here in this verse is clear warrant for the scientific study of the cosmos. The infinite variety of processes that operate in space, through time, may be divided into orderly categories and studied — that is, physical processes, chemical processes, biological processes, etc. — and the different disciplines of science thereby developed.

But notice that such study ought certainly to perceive therein “the glory of God” and “the work of his hands!” The processes of the cosmos, rather than leading men to a naturalistic, even atheistic, cosmology, ought, rather, to reveal clearly both the creative power and the redeeming grace of God.

This is the testimony of Romans 1:20: “For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead; so that they are without excuse.” Thus, both the fact of God and the nature of God are clearly revealed in the created world, and it is absolutely inexcusable for men — *especially* scientists — to fail to see this.

This is strong language, and undoubtedly must refer to something more convincing than simply the evidence of design in nature. It is well known that the so-called teleological (design/purpose) evidence for God is not very persuasive in itself. What seem to be evidences of design to a theist are merely examples of natural selection to a Darwinian. The witness of the cosmos and its processes must, therefore, be more basic than this, as we shall see.

Verse 2. “Day unto day uttereth speech, and night unto night sheweth knowledge.”

The testimony is thus continuous, not intermittent or scattered. In verse 1 the emphasis was on “space,” in verse 2 on “time.” Throughout all space and all time there is an unlimited and unending witness to God.

The word “uttereth” means, literally, “pours forth,” and emphasizes the voluminous and pervasive nature of the testimony. The word “knowledge” can be understood as synonymous with “science.” True science,

therefore, is that which expounds the glory of God and His handiwork in the processes of nature.

Verse 3. "There is no speech nor language; their voice is not heard."

The witness is unwritten and unspoken, though still clear and powerful. Therefore, although men are without excuse for failing to appropriate God's revelation in nature, they still need actually to *see* and *hear* the Word in order to be saved.

Verse 4a. "Their line is gone out through all the earth and their words to the end of the world."

The "line" here is the measuring line of the surveyor, and represents the standard against which the world is measured. Thus, the tremendous evidence of God's power and holiness and grace that should be very clearly seen in nature and its phenomena is itself a measuring-rule by which the world and its inhabitants are to be judged. This is true for men of all places ("through all the earth") and of all times ("to the end of the world").

This verse is quoted in the great missionary chapter, Romans 10, in support of the doctrine that all men are indeed lost, since they have actually already "heard" and rejected the testimony of the Lord.

For whosoever shall call upon the name of the Lord shall be saved. How then shall they call on him in whom they have not believed? and how shall they believe in him of whom they have not heard? and how shall they hear without a preacher? And how shall they preach, except they be sent? as it is written, How beautiful are the feet of them that preach the gospel of peace, and bring glad tidings of good things! But they have not all obeyed the gospel. For Esaias saith, Lord, who hath believed our report? So then faith cometh by hearing, and hearing by the word of God. But I say, Have they not heard? Yes, verily, their sound went into all the earth, and their words unto the ends of the world (Rom. 10:13–18).

This worldwide preaching of the gospel, which has condemned all men because they have not obeyed it, is none other than the witness of God in nature, according to this passage. It is interesting that the "line" of Psalm 19:4 is interpreted as "sound" in Romans 10:18. Thus, although there is no audible voice, the witness should nevertheless be heard with the ear of faith as the word of God. It calls the attention of all men to the

God of all power and wisdom, the God of perfect holiness and love, whom men should therefore diligently seek in obedient faith. But instead of obeying this light as found in nature, “that lighteth every man that cometh into the world,” men “loved darkness rather than light, because their deeds were evil” (John 1:9; 3:19).

This “line,” with its clear testimony to “the glory of God” (Ps. 19:1), is therefore also a rule that must condemn men because they have all “sinned and come short of the glory of God” (Rom. 3:23).

Verse 4b. “In them hath he set a tabernacle for the sun.”

Though all the processes that take place in the world of space and time should be recognized as declaring God’s glory, there is one phenomenon that stands out above all others — which, in fact, might be said to speak for all the others. The most glorious of God’s physical creations, in so far as its effect on man is concerned, is the sun!

It is in the universe of space (“the heavens, the firmament,” of verse 1) and time (the “day unto day,” of verse 2) that the phenomena of matter and energy, as especially displayed in the sun, the “ruler of the day” (Gen. 1:16), pour forth speech, show forth the divine handiwork, and expound the glory of God. It is “in them” that God “hath set a tent for the sun.”

The physical universe is a continuum of space, mass-energy, and time, and this profound and primary fact of science is exhibited most powerfully in the sun.

Verse 5. “Which is as a bridegroom coming out of his chamber, and rejoiceth as a strong man to run a race.”

There are a great many ways in which we can discern, through the sun, evidences of God and His glory. Physically speaking, the sun is the “light of the world.” Without it, the earth would “walk in darkness” and soon would die. Therefore, the Lord Jesus used the sun as the type of His own person and provision of spiritual light (John 8:12).

The sun speaks clearly of the great power of the One who could create such an awesome source of power, of the great wisdom of Him who could plan the world bathed in its light, of the marvelous grace of the provider of the warmth and “healing of his wings [or ‘rays’]” (Mal. 4:2), and of the infinite holiness of the God who dwells “in the light which no man can approach unto” (1 Tim. 6:16). But instead of thankfully worshipping the God who made the sun, ancient man perversely made a god out of the sun itself. And modern man has

compounded that perversity by making a god out of the mindless interplay of chance and evolution that he foolishly imagines brought the sun into existence!

It seems strange at first that the Psalmist, with such a wealth of superlatives and metaphors available which could fittingly be applied to the sun, should use the rather unlikely figures of a bridegroom and a runner instead. We do know, however, from the New Testament, that both of these figures have also been applied to Christ.

John the Baptist, the one who was “sent to bear witness of that light” (John 1:8), said of Him: “He that hath the bride is the bridegroom: but the friend of the bridegroom, which standeth and heareth him, rejoiceth greatly because of the bridegroom’s voice: this my joy therefore is fulfilled” (John 3:29). The heavenly Bridegroom must go forth to redeem and claim His bride, His Church, and His voice of authority and comfort will therefore bring deep joy to those of responsive heart.

The use of such a figure in the psalm must imply a bride hidden away in the night’s darkness, first filled with hope at the emergence of her Bridegroom from His chambers, and then with fullness of joy at her union with Him in the height of the heavens. The daily return of the sun, thus, throughout all history, should have been reminding man of God’s promise of union with Him when “unto you that fear my name shall the Sun of righteousness arise with healing in his wings” (Mal. 4:2).

The race to be run by a strong man likewise implies a difficult and hard task to be accomplished by one who is perfectly prepared for such a task and who anticipates with great joy the prize that he will receive when it is done. For the Lord Jesus, that race involved the cross. “Let us run with patience the race that is set before us, Looking unto Jesus the author and finisher of our faith; who for the joy that was set before him endured the cross, despising the shame, and is set down at the right hand of the throne of God” (Heb. 12:1–2).

In like manner, the diurnal victory of the day over the night, restoring light and warmth and health to a world which otherwise would have descended into eternal darkness and cold and death, should have continually spoken to men of the fact that the One who was strong enough to create all these things is also the strong man able to save all who will put their trust in Him. He who has all power cannot fail to win the race for final victory over the evil one, just as the light will soon triumph over the darkness, and “there shall be no night there” (Rev. 22:5).

Verse 6a. “His going forth is from the end of the heaven,
and his circuit unto the ends of it.”

This verse has often been cited as an example of the “pre-scientific” perspective of Scripture. The sun, after all, does not really move across the sky; it is the earth that moves. At least that is what 19th century critics said.

Modern astronomy, however, maintains that the sun also moves with respect to other stars in its galaxy, and that its galaxy moves with respect to other galaxies. The evidence of the best astronomic measurements indicates, indeed, that the sun moves in a gigantic orbit, at a speed of 600,000 miles per hour, that would require 230 million years for one circuit. Therefore, even in the most literal sense, “His going forth is from the end of heaven, and his circuit unto the ends of it.”

As a matter of fact, no one really knows scientifically where in the universe there is a point that does not move at all. Consequently, all motions must be measured as relative motions only. It is entirely a matter of arbitrary judgment or preference as to where the point of assumed zero motion is said to be. The best assumption in a particular case is therefore the assumption which is most practical and convenient. Consequently, it is perfectly proper and scientific to measure the motion of the sun relative to the earth, as the Psalmist has done, and as modern astronomers do likewise.

The “going-forth” of the sun, however, implies more than its trajectory across the sky. It is the same word used in the Hebrew to refer to the “going forth” of water from a spring. It suggests, therefore, something that “goes forth” from the sun itself—that is, its rays, its heat and light and energy. The same word is used also in Psalm 65:8: “Thou makest the *outgoings* of the morning and evening to rejoice.”

And it is also used in Deuteronomy 8:3: “Man doth not live by bread only, but by every word *that proceedeth out* of the mouth of the Lord doth man live.” Is there not an implication in this remarkable phrase that the energy continually pouring out from the sun is a type of the Word of Life proceeding from the mouth of God?

Finally, the same word is used in Micah 5:2, the magnificent prophecy of the eternal God who would be incarnate as a Babe in Bethlehem, “whose *goings-forth* have been from of old, from everlasting.” From the Living Word has eternally gone forth that energy, both spiritual and physical, which has sustained His creation throughout all space and time.

Do the heavens truly declare the glory of God? Why indeed it is the very Son of God himself “Who being the brightness [literally, “the out-*raying*”] of his glory, and the express image of his person, and upholding

all things by the Word of his power, when he had by himself purged our sins, sat down on the right hand of the majesty on high” (Heb. 1:3).

Verse 6b. “And there is nothing hid from the heat thereof.”

It is God in Christ who, by the continual emission of the divine energy, maintains the integrity of all the materials and processes of the universe. He “upholds all things by the word of his power.” Note the implicit equivalence here of matter and energy, one of the supposedly greatest discoveries of modern science. “By him all things consist [literally, ‘are sustained’]” (Col. 1:17). Thus, the very atoms of our own bodies are enabled to retain their structure and functions only by the continual “out-*raying*” of the “sun of righteousness.”

And all this is marvelously declared, in so far as man and his habitation are concerned, by the sun. It is the sun that supplies the power to maintain all of earth’s processes. The reactions in the sun continually release vast waves of electromagnetic energy from its surface, radiating out into space. That portion of this radiant energy which reaches the earth’s environs is converted into other forms of energy as needed to power the various processes of earth.

Surrounding the earth, the marvelous electrical phenomena associated with the earth’s atmosphere and magnetosphere are powered by the sun. In the atmosphere, the radiations are diffused as light and heat. The differential heating of the various parts of the atmosphere maintains its circulation and energizes the winds. This, combined with the heating of water surfaces by the sun, drives the amazing engine known as the hydrologic cycle, which waters the earth and makes life possible on its surface!

Light from the sun, through the process of photosynthesis, enables plant life to grow. This, in turn, supports animal life. Thus, practically all life processes draw their energy ultimately from the sun. Furthermore, when the chemical energy thus stored in organic materials is converted into wood or peat or coal or petroleum, these substances also become a source of energy for still other natural and artificial processes.

No wonder, therefore, that the Psalmist concludes his discussion of this revelation of God in the heavens by exclaiming: “And there is *nothing* hid from the heat thereof!” The radiant heat energy from the sun provides the energy for essentially all of earth’s physical and biological processes.

It is more than coincidence, therefore, that the science which deals with energy relationships in all processes has come to be known as

thermodynamics (from two Greek words meaning “heat power”). In fact, each particular scientific discipline deals with a specific group of processes (e.g., chemical processes, biological processes, etc.), but thermodynamics encompasses *all* processes, and is thus essentially synonymous with the generic term “science.”

Thermodynamics is often used in a more restricted sense, of course, as referring to the conversion of heat directly into mechanical energy and vice versa. It was, in fact, this type of study that led to the steam engine and thence to the industrial revolution of the 18th and 19th centuries. It was in this context that the science of thermodynamics was developed. And, of course, even today most energy conversion processes (this, of course, includes *all* processes) do involve utilization of heat energy in a very direct way.

Nevertheless, it must be emphatically stressed that the science of thermodynamics and the laws of thermodynamics apply universally, to all processes without exception, in so far as modern science has been able to understand them. One could justifiably read the verse under discussion thus: “There is nothing unaffected by the thermodynamics thereof.”

This point is so important that the reader would perhaps appreciate some substantiating documentation. For example, the great scientist Albert Einstein said this:

Classical thermodynamics . . . is the only physical theory of universal content concerning which I am convinced that, within the framework of applicability of its basic concepts, it will never be overthrown.²

The “universal content” of which Einstein spoke is the relation of thermodynamics to all real processes in the world, and the “basic concepts” are those enunciated in the two famous laws of thermodynamics. There are also many other thermodynamic concepts, but the first and second laws are the only ones that are of universal significance and application.

These laws account for the fact that no machine or process can be 100 percent efficient, and that a perpetual motion machine is impossible. The first law is the law of conservation of energy, stating that energy is not now being created or annihilated. Since matter and energy are interconvertible, this includes everything in the physical universe.

² Cited by Martin J. Klein, “Thermodynamics in Einstein’s Thought,” *Science*, vol. 157 (August 4, 1967), p. 509.

There are more complex formulations of the first law but all eventually arrive at the same conclusion: "The total energy of the universe is constant."³

Not only is the total energy unchanged, however. The second law states that, in every real process, the available energy decreases. That is, some of the energy is converted into heat energy at such a level that it cannot be further utilized in useful work. Therefore, the process or machine will eventually run down and cease working. Even the universe as a whole must eventually reach this point, if present processes continue.

Because the supply of energy in the universe is a constant that cannot be increased or decreased, and because at the same time the downhill flow of heat is accompanied by inevitable losses, a time will inevitably come when the entire universe will be at the same temperature.⁴

When this occurs, since the energy "gradient" will everywhere be zero, no more work can be done, all processes will cease, and the universe will die a "heat death."

It is convenient, for purposes of discussion, to divide natural processes into three categories: physical, biological, and sociological. This corresponds to the threefold division of the sciences into the physical sciences (physics, chemistry, geology, engineering, astronomy, etc.), the life sciences (zoology, physiology, medicine, etc.), and the behavioral sciences (psychology, sociology, anthropology, etc.).⁵ The two laws of thermodynamics are universal laws and, therefore, must apply to all three realms and to all three categories of real processes.

In the physical world, energy conservation is undoubtedly the best-proved and most universal of all physical principles. It is supplemented by mass conservation, momentum conservation, and the other conservation laws of physics. The second law is almost as universal in scope, although it is now viewed statistically, rather than mechanically, in many

3 Stanley W. Angrist, "Perpetual Motion Machines," *Scientific American*, vol. 218 (January 1968), p. 115.

4 *Ibid.*, p. 120.

5 This might further correspond to the three great acts of Creation: the physical universe (Genesis 1:1), the universe of life (Genesis 1:21), and the realm of the spirit (Genesis 1:28). The inorganic realm is that of the "body," the animate realm that of "body and soul," and the human realm that of "body, soul, and spirit."

applications. Entropy is understood as synonymous with “randomness” or “disorder,” and the second law states that all real processes tend to go in the direction of increasing entropy, or increasing randomness, or disorder.

For all practical purposes, the first and second laws of thermodynamics apply to all physical systems and processes without exception. Thus the “outgoings” of energy from the sun, while maintaining all of earth’s processes, eventually become the “in-turnings” (that is, literally, “entropy”) into low-level heat energy that no longer is available for useful work.

This tendency toward randomness is also true of biological systems and processes, though it is not as widely recognized. As a matter of fact, mechanistic biologists are quite insistent that biological processes are merely very complex chemical and physical processes. Vitalism in biology, the idea that there is some kind of “vital force” present in living systems that makes them uniquely different from other systems, is denied and decried vigorously by almost all biologists today. But if there is no “life force,” as the evidence strongly indicates, then there can be no doubt that the two laws also control biological processes.

Then there is the realm of man himself, and his cultures and institutions, as formally studied in the social or behavioral sciences. It may not be immediately obvious how thermodynamics affects this domain of the spirit. Yet, as our Scripture says: “There is *nothing* hid from the heat thereof.”

The sun is, of course, only a physical creation, and the heat by which it energizes the earth is physical energy. Nevertheless, the ultimate source and sustainer of this energy is Christ himself (John 1:3–5), who is also the source and sustainer of our spiritual life and energy (John 1:9; 1 John 1:7).

Man understands very little yet about the physiologic mechanisms associated with his spiritual decisions, though there undoubtedly is some relation. The intensely sophisticated electric circuitry built into man’s brain and nervous system does have a bearing on his memory, his ability to assimilate knowledge and to make choices. Everyone is aware that his physical condition may affect his emotions, and vice versa. Furthermore, damage to the brain or to the nervous system may result in a complete change in personality, usually for the worse. Genetic studies have demonstrated that hereditary factors influence not only physical characteristics but also the ability to learn and reason.

Though much remains to be discovered about these interesting subjects, there appears to be no doubt that physical mechanisms exert

some kind of control over our attitudes and decisions, just as they do over biological processes. If this is so, since all such mechanisms are ultimately powered by the sun's energy, then the sun may even be the indirect source of the energy for our mental activity. And, of course, this finally comes from the Lord Jesus Christ! "In him we live and move, and have our being," (Acts 17:28), so that He is "not far from every one of us" (Acts 17:27). When He said, "I am the light of the world" (John 8:12), this was more than a statement of a spiritual truth — though it certainly includes that. In the fullest and most ultimate sense, He is the source, through the sun, which reflects His glory, of all physical, biological and mental power.

It is significant that man normally works during the day and rests at night. It is also significant that the "unfruitful works of darkness" (Eph. 5:11) are normally done at night. "They that sleep sleep in the night, and they that be drunken are drunken in the night" (1 Thess. 5:7). Somehow, the presence of the warmth and light of the sun seems to stimulate productive and beneficial activities, whereas its absence often leads to lethargy and sleep, and also to "rioting and drunkenness . . . chambering and wantonness . . . strife and envying" (Rom. 13:13). The exact cause-and-effect relation of the sun's energy to all these characteristics of man's behavior is not yet fully known, yet there is *something* there.

The sun's energy may also cause disintegration and death! Too much exposure to its ultraviolet radiation or its heat or its light may cause cancer or sunstroke or blindness. Solar radiation may well be a primary agent in somatic mutations, aging and death. Though absolutely necessary for life, the sun eventually leads to death! In like manner, the Lord Jesus is the "Sun of righteousness with healing in his wings [or 'rays']" (Mal. 4:2) to them that fear His name, but He is a "consuming fire" (Heb. 12:29) to the wicked and the proud, and the "day that cometh shall burn them up" (Mal. 4:1). There is a future day when the sun will "scorch men with fire" (Rev. 16:8), when "the curse [hath] devoured the earth . . . the inhabitants of the earth are burned, and few men left" (Isa. 24:6).

In any case, whatever agency the physical sun may ultimately be shown to exercise in the matters, there is no doubt that human life is also under the reign of the universal principles of conservation and decay. That is, man's spirit is both unending and degenerating, just as is the physical energy constituting his body. Though its temporary body may go through physical death, the spirit will continue to exist and to decay, forever, "He that is unjust, let him be unjust still (literally 'yet more')" (Rev. 22:11). "And the smoke of their torment ascendeth up forever and

ever" (Rev. 14:11). "Where their worm dieth not, and the fire is not quenched" (Mark 9:48).

Every person knows by experience that, if he simply lets himself go, he goes down. He doesn't get better or do better if he simply "turns inward" on himself — or, literally, "entropies." Even a godly man such as the apostle Paul had to say, "But I see another law in my members, warring against the law of my mind, and bringing me into captivity to the law of sin which is in my members" (Rom. 7:23).

And if this declining condition is true of individual men, it is bound to be true also of his institutions. Just as a baby grows into an adult, who thrives for a time but eventually ages and dies, similarly, cities, nations, cultures, languages, and whole civilizations rise and fall. In a generic sense, "life" and "language" and "civilization" are conserved, but *individual* languages and civilizations and empires decay and die.

Thus, man's entire dominion — body, soul, and spirit — his physical, biological, and social world — is under the "bondage of corruption," "groan[ing] and travail[ing] together in pain until now" (Rom. 8:21–22). A universal effect requires a universal cause, and that cause, beyond doubt, is God's curse on man and his domain because of sin (Gen. 3:17–19). The entrance of spiritual disorder into God's perfect creation (Genesis 1:31) led to the imposition of a universal and age-long reign of physical and biological decay and death. Nevertheless, God's law of conservation is still in effect, and the world and life go on.

Hope also goes on, because God has promised a Redeemer! Some day, this groaning creation will be "delivered from the bondage of corruption," and "there shall be no more curse" (Rev. 22:3). In that day, the sun will be replaced by the One whom it now only feebly represents. "And the city had no need of the sun, neither of the moon, to shine in it: for the glory of God did lighten it, and the Lamb is the light thereof" (Rev. 21:23).

Even in this present time, the same coming Redeemer has made possible individual deliverance from bondage to the law of decay and death. He has borne the full penalty and suffering of the curse himself, on the Cross, dying for our sins and rising for our justification.

"For the law of the Spirit of life in Christ Jesus hath made me free from the law of sin and death" (Rom. 8:2). This tremendous gift is imparted by the Holy Spirit, in response to individual saving faith in the Lord Jesus Christ and His Word, salvation by the grace of God!

In order to set aside the principle of decay and death in the spirit (and ultimately in the body and soul as well), there must be an infusion of new

life — a regeneration — and this, of course, can come only from that which is not itself subject to the same principle.

Now, there is only one thing in this present world that meets this criterion! Since we are still in the flesh, it must be physically accessible and intelligible to the mind, as well as operational in the spiritual realm, and yet it cannot be subject to the universal law of decay.

The one and only thing in this world that can fulfill these requirements is the Word of God. This Word has been divinely revealed and inerrantly inscripturated, to be accessible to man, but it is also eternal and incorruptible and thus able to mediate this great salvation to lost men. “The Word of God is quick and powerful” [literally, “living and energizing” — Heb. 4:12]. “Heaven and earth shall pass away, but my words shall not pass away” (Matt. 24:35). “All flesh is as grass . . . but the Word of the Lord endureth forever” (1 Pet. 1:24–25). “All Scripture is [God-breathed] . . . that the man of God may be perfect” (2 Tim. 3:16–17). “The engrafted Word . . . is able to save your souls” (James 1:21). Over and over again, we are reminded in the Bible that God’s Word is uniquely incorruptible and everlasting, in contrast to everything else in the world, which is under the bondage of corruption and death. “Thou hast magnified thy Word above all thy name” (Ps. 138:2).

Therewith, we come to the second major division of this magnificent Psalm! God has spoken to man in His creation, but man has not heeded its testimony. Although nature everywhere bears witness to His glory, man himself has come short of God’s glory. He must have God’s written Word before he can understand the living Word.

Verses 7–9. “The law of the Lord is perfect, converting the soul: the testimony of the Lord is sure, making wise the simple. The statutes of the Lord are right, rejoicing the heart: the commandment of the Lord is pure, enlightening the eyes. The fear of the Lord is clean, enduring for ever: the judgments of the Lord are true and righteous altogether.”

Though natural revelation points to God and His glory, it does not convert man’s soul. Although God’s gracious provisions in nature preserve man, they simultaneously condemn man. The Holy Scriptures, however, are able effectually to bring men back to God, as they set forth in all its clarity and power the great redemptive work of the Lord Jesus Christ, the sun of righteousness and the Light of the World.

At the time David wrote the Psalm, essentially all he had of the written Word was the *Torah*, the law of Moses. And surely, if such

marvelous statements could be made concerning this first portion of the Scriptures, how much more fervently should we speak these testimonies when we think of the full canon of Scripture as we have it in the dispensation of grace? In his last book, the apostle Paul, perhaps with these very verses in mind, penned his own tremendous testimony:

All Scripture is given by inspiration of God, and is profitable for doctrine, for reproof, for correction, for instruction in righteousness: That the man of God may be perfect, thoroughly furnished unto all good works (2 Tim. 3:16–17).

Thus, combining David and Paul: “The law of the Lord is perfect . . . that the man of God may be perfect.” All the believer needs — for conversion, for instruction, for cleansing, for all things — is found in the Word of God.

Note also the contrast between the names of God as used in the two divisions of the psalm. In verse one, the name is “God” — *elohim* — the mighty Creator. But in verses 7, 8, 9, and 14, the name is “Lord” — *Jehovah* — the name of redemption and salvation.

Verse 10. “More to be desired are they than gold, yea, than much fine gold: sweeter also than honey and the honeycomb.”

The man who has acquired a knowledge of Scripture is infinitely wealthier than the materially richest man on earth, because he has stored up that which is eternal. Likewise, the most exquisite pleasures of this life, represented here by the healthful sweetness of the honeycomb, are not to be compared to partaking of His Word. “Thy words were found, and I did eat them; and thy word was unto me the joy and rejoicing of mine heart” (Jer. 15:16).

Verse 11. “Moreover by them is thy servant warned: and in keeping of them there is great reward.”

The Scriptures provide perfect instruction for those things we ought to do, as faithful servants of the Lord, and those things that we must *not* do, lest we dishonor Him. We are both warned, lest we suffer loss, and directed, that we might earn rewards. We are not left to grope in darkness, but we have His Word as a lamp unto our feet. Therefore, also, that same Word will be our judge when we give an account to God (John 12:48).

Verses 12–13. “Who can understand his errors? cleanse thou me from secret faults. Keep back thy servant also from

presumptuous sins; let them not have dominion over me: then shall I be upright, and I shall be innocent from the great transgression."

In the final three verses of this psalm, the writer records the true and fitting response of the heart that has been touched by the Word. Just as natural revelation in itself fails to bring man to full assurance of salvation, even God's written Word is effective only when received in faith and obedience. Otherwise, even the Holy Scriptures bring only condemnation, rather than salvation. "But the word preached did not profit them, not being mixed with faith in them that heard it" (Heb. 4:2). "Be ye doers of the word, and not hearers only, deceiving your own selves" (James 1:22).

But when he who reads, or he who hears, the Word of God does respond in obedient faith, that Word proves effective to the cleansing of the soul.

It is only the written Word, sincerely heard, that enables a man to see those things in his life that displease the Lord, his "secret faults." "By the law is the knowledge of sin" (Rom. 3:20). But when the convicted sinner does seek to understand his errors, and prays for cleansing from them, he can certainly be confident that his prayer is answered.

More serious yet are those "presumptuous sins," acts performed willfully in full knowledge that they are wrong in the sight of God. The psalmist, though a true believer and thoroughly committed to the Scriptures, recognizes the weakness of his carnal nature and how easily he might be pressured or deceived into presumptuous sins, and, eventually, into the "great transgression." By the latter is evidently meant a condition more serious than both the "secret errors" and the "presumptuous sins," which may lead into that state.

Although not explained in this passage explicitly, it may well be that the "great transgression" of Psalm 19 is the "sin unto death" of 1 John 5:16. Sins committed willfully will soon lead to a "defiled" conscience (Titus 1:15), no longer "bearing witness" (Rom. 2:15) concerning the sins revealed in the Word. Once presumptuous sins have acquired dominion over a man's conscience, he will certainly not be troubled or even exercised over his mere "errors." Habitual unconcern with God's will and God's Word may eventually lead even a believer into such a state that he is better off dead, as far as his service and influence for the Lord are concerned. The apostle Paul refers thus to such a case: "To deliver such an one unto Satan for the destruction of the flesh, that the spirit may be saved in the day of the Lord Jesus" (1 Cor. 5:5).

Therefore, the Psalmist prays earnestly that presumptuous sins will not acquire dominion over him, and God will certainly answer such a prayer as this. “For sin shall not have dominion over you: for ye are not under the law, but under grace” (Rom. 6:14). If the believer, constantly walking in the light of God’s Word (Ps. 119:105; 1 John 1:7), will quickly judge and confess each sin, whether small or large, as soon as he knows about it, then his life will be one of victory and fruitfulness (1 John 1:9; John 15:7, 16).

Verse 14. “Let the words of my mouth, and the meditation of my heart, be acceptable in thy sight, O Lord, my strength, and my redeemer.”

The psalm concludes with this glorious prayer of full submission to the God of all power and exceeding grace. Having been fully instructed and cleansed by the Word, the believer desires that every word from his lips and every thought of his heart may honor his Lord.

“The tongue can no man tame, it is an unruly evil, full of deadly poison.” “If any man offend not in word, the same is a perfect man, and able also to bridle the whole body” (James 3:2). Although a man has greater difficulty in controlling his tongue — speaking only “that which is good to the use of edifying” (Eph. 4:29) — than any other part of his body, the indwelling presence of God’s Holy Spirit, instructing and empowering him through the Word, will enable him to attain victory even over his tongue, and his spoken words will prove acceptable to God and effectual in testimony.

But if one’s *words* are impossible to control without divine help, what could be said about one’s very thoughts! Yet, even the meditations of the heart should and can be made acceptable to the Lord. “For the weapons of our warfare are not carnal, but mighty through God to the pulling down of strong holds; Casting down imaginations, and every high thing that exalteth itself against the knowledge of God, and bringing into captivity every thought to the obedience of Christ” (2 Cor. 10:4–5). The power of the incorruptible Word is adequate to the cleansing and anointing of even the tongue and the mind of one who assuredly believes it.

This essential and cooperative union of the words of the mouth and the thoughts of the heart, for an effective Christian life, is emphasized frequently in the New Testament. Both are indeed components of salvation itself. Therefore, “If thou shalt confess with thy mouth the Lord Jesus, and shalt believe in thine heart that God hath raised him from the dead, thou shalt be saved. For with the heart man believeth unto

righteousness; and with the mouth confession is made unto salvation” (Rom. 10:9–10).

Similarly for power in witnessing, Christ must rule over both heart and tongue. “But sanctify the Lord God in your hearts; and be ready always to give an answer to every man that asketh you a reason of the hope that is in you with meekness and fear” (1 Pet. 3:15).

Indeed, in every aspect of the day by day fellowship of the believer with his Lord, the Word of God is to give him joy and thankfulness, both on his lips and in his heart. “Let the word of Christ dwell in you richly in all wisdom, teaching and admonishing one another in psalms and hymns and spiritual songs, singing with grace in your hearts to the Lord” (Col. 3:16).

Finally, as the psalm began with a testimony to the glory of God in the heavens, so it ends with a testimony to the greater glory of God in the personal experience of the believing and obedient person. The Lord Jesus, to the believer, is both “my strength and my redeemer,” both the omnipotent source of power and also the gracious provider of forgiveness and salvation.

As He, by His great power, sustains the sun and all the universe, so He provides strength for every need. He is the Rock (same word as “strength”) of our salvation.

As He in grace provides the sun and all other blessings for maintenance of life on earth, so He in infinitely greater grace has become the redeemer of our souls. The great Creator and sustainer of the universe, who in righteousness was forced to bring it under the curse because of man’s sin, has himself borne the curse and purged our sins (Heb. 1:2–3)!

Dragons in Paradise

And there appeared another wonder in heaven; and behold a great red dragon. . . . And the great dragon was cast out, that old serpent, called the Devil, and Satan, which deceiveth the whole world. . . . And they worshiped the dragon (Rev. 12:3,9; 13:4).

The dinosaur mania of this generation reached a crescendo with the release in 1993 of the much-publicized movie *Jurassic Park*. Not only did record-breaking throngs see the movie (which featured a modern theme park stocked with real dinosaurs, cloned from ancient dinosaur DNA extracted from blood-sucking insects preserved in amber ever since the so-called Jurassic period), but stores are still selling great numbers of dinosaur toys and books and paraphernalia of all sorts. Most of this

propaganda for evolution (for that's what it amounts to!) was aimed at children, who seem to be easily fascinated by the awesome monsters of this supposedly prehistoric era.

This almost worshipful fascination is nothing new, though its extent has grown explosively. One wonders how many leading modern evolutionists were drawn into evolutionism through their childhood study of dinosaurs. Stephen Jay Gould, for example, testifies that he got his start that way, and he is probably today's leading spokesman for evolution.

What's going on here? Is this just another fad, or is it in some way an important sign of the times? Actually, all the nations of antiquity seem to have had a similar obsession with dinosaur-like animals that they called *dragons*. The biblical writers, inspired by God, also wrote about dragons. The first reference to created animals, in Genesis 1:21, says that "God created great whales," but the Hebrew word translated "whales" (*tannin*) is translated "dragons" in over 20 other passages. Note especially Isaiah 27:1: "In that day the Lord . . . shall punish leviathan the piercing serpent, even leviathan that crooked serpent; and he shall slay the dragon that is in the sea."

This type of sea dragon was called a *leviathan* (see also Ps. 74:14; 104:26). It was described by God himself in Job 41:1–34 as a fearsome, fire-breathing (verse 21) monster, whose scaly hide (verses 15–17) could not be pierced with sword or spear (verses 7, 26–29). God also described a huge land dragon called *behemoth* (Job 40:15–24) that "moveth his tail like a cedar" and is "the chief of the ways of God," and was impossible to capture (verses 17, 19, 24). Various other dragons are depicted as dwelling in different types of habitats and as being of various sizes (e.g., Isa. 34:13; Mic. 1:8; Mal. 1:3). In some of these cases, modern translations have rendered *tannin* as "jackal," but the Hebrew word means "dragon," or "monster," *not* "jackal."

Dragons were even described in reputable zoological treatises published during the Middle Ages. Even though dragons sometimes were said to have supernatural abilities, all these ancient nations regarded them as real animals, frequently encountered by humans.

The article on dragons in the *Encyclopaedia Britannica* (1949 edition) noted also that dinosaurs were "astonishingly dragonlike," even though its author assumed that those ancients who believed in dragons did so "without the slightest knowledge" of dinosaurs. All dinosaurs are assumed by evolutionary geologists to have been extinct since the end of the Mesozoic era, about 65 million years ago, whereas the first dinosaur fossils were not discovered until early in the 19th century.

In any case, dinosaurs — like dragons — are said to have existed at one time in great numbers and varieties all over the world. Great dinosaur bone beds have been found on every continent, as far north as Spitzbergen in the Arctic Ocean, and as far south as Antarctica, about 400 miles from the South Pole.

Even more astonishing have been the vast numbers of dinosaur tracks and trails. The symposium *Dinosaur Tracks and Traces*⁶ documents hundreds of dinosaur-track sites all over the world. They are found in alluvial-fan deposits, flood-plain sediments, lake sediments, dune-like formations, deltas, and shoreline systems.

Many geologists have decided recently that the age of the dinosaurs did come to a sudden end as the result of a global catastrophe of some kind, although there is much disagreement as to what type of catastrophe this might have been. A global Flood, accompanied by tremendous volcanic eruptions, with the implied resulting worldwide climatic change from subtropical to the present latitudinal variations, could well account for the vast dinosaur graveyards and trackways all over the world.

The Bible, of course, describes just such a Flood, which occurred several thousand years ago. There are now thousands of scientists who have become creationists and are convinced that the biblical Flood provides a much better explanation than the geological-age system for the phenomena of earth history, including the dinosaurs and their extinction.

In that connection, suppose the dinosaurs continued to survive for a time in the post-Flood world. This would account perfectly for all the dragon stories, many embellished over the centuries with legendary accretions, but at the same time based on a substantial residuum of fact. Bill Cooper, a British student of antiquities, has published a most impressive compilation of dragon/dinosaur encounters with ancient people.⁷

It may even be that some dinosaurs still survive in isolated regions and especially in the oceans and deep lakes of the world. The famous plesiosaur-like creature dredged up near New Zealand in 1977,⁸ and the numerous native accounts of a brontosaur-like animal in the swampy

6 *Dinosaur Tracks and Traces*, ed. D. D. Gillette and M. G. Lockley, (Cambridge University Press, 1989), 454 p.

7 Bill Cooper, "Living Dinosaurs from Anglo-Saxon and other Early Records," *Creation Ex Nihilo Technical Journal*, vol. 6, no. 1 (1992), p. 49–66.

8 See *Oceans*, (November 1977), p. 56–59.

interior of the Congolese rain forests⁹ should be neither dismissed nor ignored.

Most creationists believe that dinosaurs have co-existed with man from the beginning, becoming extinct only in the Middle Ages. That being so, one must envision a pre-Flood world with vast herds of dinosaurs occupying many areas in every region. The antediluvian human population would certainly be familiar with their existence.

There were, therefore, many living reminders to antediluvian people everywhere on the earth of “the great dragon . . . that old serpent, called the Devil, and Satan” (Rev. 12:9). These great beasts should have reminded pre-Flood men and women of the serpent whom their first ancestors had encountered in the Garden of Eden, bringing sin and death into God’s perfect world.

Even after the Flood, dinosaurs could still be seen occasionally, though not in the great herds common in former times. At the climax of the Satan-caused sufferings of the prophet Job, for example, God told Job to observe two of these great animals, the land-dwelling behemoth and the ocean-dwelling leviathan, and to realize that, even though no man alone could ever vanquish such awesome reptiles, God was well able to defeat them, for it was He who had made them. Just so, God had also created the (later, fallen) angel Satan, who had taken over the body of the serpent back in Paradise, and God would vanquish him, as well.

That old dragon invaded paradise, and God cast him out into the earth, where he continues to this day leading men and women to rebel against God and His Word. It is he “which deceiveth the whole world” (Rev. 12:9) with the monstrous lie that there never was a Creator whom men should worship. He wants to reign himself, and to persuade the world to worship him instead of its real maker and sustainer and Redeemer!

And amazingly enough, the time is coming soon when the ungodly world will do just that! In the Bible’s great prophecy concerning the humanistic dictator who will reign over the whole world for a brief time at the end of the age, a man appropriately called the Beast will arise, who will not “regard any god,” but will only “honor the god of forces” (Dan. 11:37–38). We read that “all the world wondered after the beast. And they worshiped the dragon which gave power unto the beast” (Rev. 13:3–4).

They — all the world — will *worship the Dragon!* And if we look carefully, we can already see the foreshadows being cast by these coming events, when we observe the youth of the world so enamored of dinosaurs.

9 See *Science*, (November 1980), p. 6–7.

People should be thinking, instead, about “whatsoever things are lovely” and “whatsoever things are of good report” (Phil. 4:8), and not obsessed with creatures that are monstrous and fierce and symbolic of “that old serpent.” The many occult monsters regularly depicted in children’s television and video games are also a danger.

The New Testament word “paradise” is transliterated directly from the Greek, which in turn was taken over from the Hebrew *pardec* (pronounced “par-dace”). Its basic meaning is “park.” It may, therefore, be no coincidence that Hollywood’s leading “New Age” producer chose to fill his “Jurassic Park” with a bestiary of revived dinosaurs. The great dragon once again symbolically is living in paradise.

Satan is, indeed, still alive and well on planet Earth! Overt satanism is increasingly influential, especially among young people, and so are witchcraft, astrology, spiritism, theosophy, and the other occult “sciences,” all of them based squarely on the age-old deception of evolutionary pantheism. Furthermore, there are many New Age cults and even secret fraternities and lodges that, at least in their advanced degrees, actually honor Lucifer (Isa. 14:12) as their highest object of worship, in effect uniting with him in his determination to “exalt my throne above the stars of God” and to “be like the most High” (Isa. 14:13, 15). All such are seeking to bring in a “new world order,” with a world government, a global economic system, and especially a world religion of evolutionary humanistic pantheism, with the monotheistic religions, especially biblical Christianity, being banished from the earth!

The world is heading rapidly in that direction, and the modern dinosaur mania may well become an effective contributing factor to reach that evolutionary goal, especially among the youngest generation — the generation that may well be leading the world in the coming new age.

But God is still in control. Although the behemoth was the strongest of all created land animals, “He that made him can make his sword to approach unto him” (Job 40:19). And though the leviathan “is a king over all the children of pride,” yet God says that not even leviathan can “stand before me” (Job 41:34, 10). God one day “shall punish leviathan . . . and he shall slay the dragon that is in the sea” (Isa. 27:1). Finally, “the devil that deceived them was cast into the lake of fire . . . and shall be tormented day and night for ever and ever,” along with all the rebellious angels and all the rebellious men and women whose names are not “written in the book of life” (Rev. 20:10, 15).

There will be no dragons in paradise in that day. For “there shall in no wise enter into it any thing that defileth, neither whatsoever worketh

abomination, or maketh a lie: but they which are written in the Lamb's book of life" (Rev. 21:27).

The Resting Ark, the Grounded Fish, and the Empty Tomb

And the ark rested in the seventh month, on the seventeenth day of the month, upon the mountains of Ararat (Gen. 8:4).

And the Lord spake unto the fish, and it vomited out Jonah upon the dry land (Jon. 2:10).

He is not here: for he is risen, as he said. Come, see the place where the Lord lay (Matt. 28:6).

These three verses of Scripture speak of three great events in history, widely separated from each other in time, but each involving a mighty miracle. Each testifies of God's creative power, as well as His judgment on sin and His grace in salvation. The accounts tell of three remarkable, specially prepared — yet temporary — domiciles, and the amazing experiences of their occupants. Each record has been bitterly attacked by unbelieving skeptics, but the accounts are true and the events were real.

1. The Ark

The great Flood (Gen. 6–9) was a global cataclysm of such intensity and duration that "the world that then was, being overflowed with water, perished" (2 Pet. 3:6). The biblical record says that "all that was in the dry land, died. And every living substance was destroyed which was upon the face of the ground . . . and Noah only remained alive, and they that were with him in the ark" (Gen. 7:22–23). This was neither a "local flood" nor a "tranquil flood," as alleged by certain evangelicals, but a worldwide hydraulic, volcanic and tectonic upheaval that left in its wake a sedimentary graveyard all around the earth that averages a mile in depth, together with a biologically impoverished world on its surface.

This fact is indicated by an abundance of geological and paleontological evidence,¹⁰ which has been described in detail by creationist scientists. The conclusive testimony, however, is given by the Lord Jesus Christ: "As the days of Noe were, so shall also the coming of the Son of man be. . . the flood came, and took them all away" (Matt. 24:37, 39).

¹⁰ See, for example, the Henry M. Morris book *The Biblical Basis for Modern Science* (Grand Rapids, MI: Baker Book House, 1984), p. 360–364, for a brief summary of this evidence.

The great Flood was an instrument of both judgment and salvation. To the unbelieving world, it was a time of destruction, for “the wickedness of man was great in the earth,” and God had said, “I will destroy them with the earth” (Gen. 6:5, 13). But it was also a time of great cleansing, “wherein few, that is, eight souls were saved by water” (1 Pet. 3:20). The same floodwaters that destroyed the ungodly world also bore up the ark that carried the righteous remnant, delivering them from the corruption which otherwise would soon have engulfed them as well.

The ark that Noah prepared in accordance with God’s specifications was more than adequate to accommodate representatives of all the created kinds of land animals in less than half its volumetric capacity.¹¹ The ark also provides a beautiful picture of salvation. Noah had “found grace in the eyes of the Lord,” and, therefore, he and all his house were called by God into the strong ark of safety, securely shut in by God himself (Gen. 6:8; 7:1, 16) while the world drowned and died outside.

Finally, as the floodwaters began to recede, the ark “rested” on the mountains of Ararat. It is most interesting to note here that the Hebrew word for “rest” in this verse is actually the same as the very name of “Noah!”

2. *The Fish*

More than 15 centuries later, Jonah (whose name means “dove” — perhaps in further commemoration of God’s grace at the Flood), fleeing from the will of the Lord, was cast into another violent sea, and soon would have perished, except for God’s mercy. This time, however, (the) man was saved from drowning, not in an ark, but in a great fish prepared by God (Jon. 1:17).

The account of “Jonah and the whale” has been the object of almost as much ridicule as that of “Noah and the ark.” The event, of course, was clearly a miracle, and is so presented in Scripture. It was the Lord himself who prepared the great fish and then preserved His rebellious prophet through the ordeal. Although there have been a number of historical instances reported of seamen surviving the experience of being swallowed by a whale or a whale-shark, no one except Jonah has ever survived in such a place for three days and three nights. The fish that swallowed Jonah finally had to release him, at God’s command, spewing him out on the shore alive. As the ark was grounded on the mountain, so the great fish was presumably then stranded on the beach. Jonah, saved by God’s grace out of the waters of judgment, then went on to preach salvation to the lost people of Nineveh.

¹¹ Ibid., p. 291–296.

The conclusive reason for believing this amazing record, of course, just as in the case of the great Flood, is found in the words of the Lord Jesus: “For as Jonas was three days and three nights in the whale’s belly; so shall the Son of man be three days and three nights in the heart of the earth” (Matt. 12:40).

Christ also used Jonah’s experience, just as He had that of Noah, as a warning of the coming judgment: “The men of Nineve shall rise up in the judgment with this generation, and shall condemn it: for they repented at the preaching of Jonas; and, behold, a greater than Jonas is here” (Luke 11:32).

3. The Tomb

If anyone, however, should question whether the mere testimony of one man — Jesus Christ — is really sufficient to prove the historicity of the worldwide Flood and Jonah’s experience in the great fish, let it be remembered that Christ was there! After all, it was He who created all things in the beginning (John 1:3; Col. 1:16), and who later gave the specifications for the ark to Noah and prepared the fish for Jonah.

And if anyone questions that Jesus Christ is really God, he should carefully consider the witness of His empty tomb. This was a new tomb, specially prepared (like the ark and the fish), hewn out of the rock by Joseph of Arimathea. When God cursed the ground (actually including the whole creation) because of man’s sin (Gen. 3:17; Rom. 8:20, 22), “death passed upon all men, for that all have sinned” (Rom. 5:12). Death is the great enemy, and a mere man could no more conquer death and rise from the dead than he could reverse the orbit of the earth and turn back the years of time. Only God, who himself had created time (as well as space and matter), and then had subjected the creation to the bondage of decay and death, could ever vanquish death.

The irrefutable evidence of the empty tomb, plus the “many infallible proofs” (Acts 1:3) given to His followers by ten or more post-resurrection appearances to them, with many other supplementary lines of supporting evidence, all combine to make Christ’s bodily resurrection from the dead what many experts in historical and legal evidence have called the best-proved fact of history.

Thus, He is God as well as man, the God/man. All that He said is true, and all that He did must be right, by definition! For example, His affirmations of the historical fact of recent special creation (Mark 10:6–9), of the fiery destruction of Sodom and Gomorrah (Luke 17:28–30), and of the prophetic revelations of Daniel (Matt. 24:15), as well as the worldwide flood and the miraculous experience of Jonah, are all explicitly

and incontrovertibly true, because He said so. As the God of creation, He knows all things and cannot lie.

Like both the ark and the great fish, the empty tomb speaks of both judgment *on* sin and salvation *from* sin. The first two events are not only historical events, but they are also types and prophecies of the third event, the greatest of all. When Christ died for our sins and rose again, He delivered from judgment and death all those who believe on His name and trust Him for salvation! At the same time, His victory over death is a sure witness that those who reject Him remain in their sins, and must anticipate and soon experience the judgment to come.

It is noteworthy also that Jonah's experience prophesied the *duration* of Christ's death ("three days and three nights"), whereas Noah's experience prophesied the *anniversary* of His resurrection ("seventh month, on the seventeenth day of the month" — that is, three days after the Passover, which was on the fourteenth day of the seventh month of the civil year, as well as the first month of the religious year).

Modern-day naturalistic skeptics who, in the face of overwhelming scientific and biblical evidence against evolution still reject the fact of special creation, are "without excuse" (Rom. 1:20). Those who deny the fact of the cataclysmic Genesis flood, despite the great body of evidence supporting it, are guilty of "willing ignorance" (2 Pet. 3:5–6). Those who reject the "sign of the prophet Jonah" are, Jesus said, "a wicked and adulterous generation seeking after a sign" to whom "there shall no (other) sign be given" (Matt. 16:4).

Finally, the most varied and abundant evidence of any event in ancient history supports the fact of Christ's bodily resurrection. Those who continue to reject the infallible Word of God and who refuse His offer of forgiveness and eternal life through the Lord Jesus Christ finally will die in their sins.

But they will surely be "without excuse" when they meet God, and are called to account for their "willing ignorance." The rocks of the earth bear their clear geological witness everywhere to the great watery judgment of the past, and thus also to the fiery judgment yet to come. The converted Ninevites of antiquity, who believed the preaching of the miraculously delivered Jonah, will bear witness against all those nations today who still refuse the Word of One greater than Jonah. Finally, the empty tomb, where Christ once slept in sacrificial death, is still proclaiming its unshakable testimony that He is forever our living God and Savior!

One can always devise objections, if he tries, to the most persuasive of Christian evidences, but the Scriptures warn that such an attitude is

dangerous folly. “The fear of the Lord is the beginning of knowledge: but fools despise wisdom and instruction” (Prov. 1:7).

In the meantime, Christians have abundant “reason for the hope that is in you” (1 Pet. 3:15), even though it must remain *hope* (not “sight,” as noted in Rom. 8:24) until Christ returns. Our triune God has, indeed, “begotten us again unto a lively hope by the resurrection of Jesus Christ from the dead” (1 Pet. 1:3).

Index of Subjects

- Adam
 - dominion mandate 88–91
 - naming animals 85–88
- age
 - appearance of 19–20
 - earth 73–82
 - problems 85–88, 91–93
- American system 119–121
- angels
 - created beings 127
 - host of heaven 189–190
 - purpose of 53
- animals
 - creation of 17, 18
 - kingdom age 91, 105
 - named by Adam 85–88
 - care of 89–90
 - sacrifice of 90, 104
- ark of Noah
 - need for 67–68
 - Noah's faith 185–187
 - record confirmed by Christ 212
 - type of Christ 215
- atheism and evolution 97–104, 128
- Babel
 - Tower of 29–31
 - origin of languages 31
 - origin of paganism 31
- biblical creationism
 - See* creation, biblical
- big-bang theory 157
- canopy theory 20
- Christ
 - creationist beliefs 139–141
 - Creator 114, 122, 126, 151–152
 - death of 100, 137–138, 145–146
 - deity of 129–130, 132
 - Flood, belief in 68, 212
 - gospel of 63, 116
 - King of creation 126–129
 - Passion Week 141–147
 - physical features 133
 - purpose of coming 136–137
 - recent creation, belief in 81–82, 140
 - Resurrection 147–148, 214
 - salvation through faith in 100, 117
 - Second Coming of 160–161
 - Sustaining creation 201
 - Theophanies 129–133
 - time of birth 135–136
 - virgin birth 134–135
- Christology
 - founded on creation 114–115
 - incarnation 129–130, 133–137
 - Resurrection 147–148
- return to earth 143–144, 160–161
- substitutionary death 137–138, 144–146
- chronology
 - Holy Week 141–147
 - human 69–72
 - Ussher 83–85
- compromise theories
 - apostasy danger 108–112
 - counter-productive 169–171
 - Darwin's sad end 108–110
 - day-age theory 42–50, 75
 - denigrating God 103–108
 - framework theory 61–64
 - gap theory 50–60
 - intransigence of evolutionists 96–103
 - progressive creationism 40–42, 106
 - revelatory-day theory 49–50
 - theistic evolution 36–40
- conservation
 - biblical references 27, 156–157
 - earth made new 158–160
 - principle of 23–25, 157, 199
- creation
 - assurance of Resurrection 147–148
 - biblical 12, 13–33, 62–63, 79–82, 121–122
 - characteristics 18–21
 - completed 25–26, 38
 - compromise theories 35–64
 - date of 70
 - definition 9
 - foundation of Christianity 113–117
 - foundation of government 119–121
 - foundation of science 118–119
 - opposition to 177–179
 - praises for 122–124
 - progressive 40–42, 74–75
 - recent 74–79
 - spiritual battle 180–183
 - works of 16–18
- Creator God
 - existence of 10
 - Jesus Christ 114, 122, 151–152
 - redundancy in evolution 100–103
 - scientific evidence of 192
- curse on the creation
 - See* second law of thermodynamics
- day-age theory
 - failed compromises 75
 - fallacies 42–50
- days, length of creative
 - See* six days of creation
- death
 - characteristic of geologic ages 48–49

- essential in evolutionism 105–106
- none before sin .. 21, 51–52, 77–78, 90, 104–105
- sacrifice of Christ 100
- dinosaurs
 - contemporaneous with man 209–210
 - modern mania 207–208
 - symbolic of Satan 211–212
- dominion mandate
 - all honorable vocations 90, 121
 - human government 119–121
 - science and technology 118–119
 - stewardship over creation 88–91, 117–118
- dragons
 - behemoth and leviathan 208, 211
 - identical with dinosaurs 208–209
 - Satan 207, 210–211
- earth
 - creation of 17–18
 - decaying 153–155
 - destruction of 157–158
 - renewed 158–160
- ecology
 - divine plan 105
 - stewardship under man 88–91, 105
- entropy
 - See* second law of thermodynamics
- ethics and morality 39, 97–104
- evangelism
 - effectiveness of creationism 169–171
 - founded on creation 116–117, 150–151, 163–167
 - ICR survey 171–177
 - importance of Resurrection 150–152
 - seed-sowing 163–164
- evolutionism
 - anti-Christian 97–100
 - atheistic 97–104, 128
 - compromises with 35–64, 95–112
 - contradicts entropy 38–39
 - definition 9
 - theistic 36–40
- extra-terrestrial life 189
- faith 115, 185–187
- fall of man
 - repugnant to evolutionists 103–104
 - sin the cause of 26–28, 126
- family, institution of 117
- firmament 20, 142, 191
- first law of thermodynamics
 - biblical references 27, 156–157
 - definition 24
 - energy conserved 198
- first mention, principle of 124
- flood of Genesis
 - height and duration 67
 - key to fossil record 28–29
 - local flood theory 65–68
 - testimony of Christ and Apostles 68, 212
 - tranquil flood theory 68–69
- fossil record
 - evolutionary interpretation 48–49
 - flood of the Bible 28–29
 - gaps in 41
- foundational importance of creation
 - American system 119–121
 - Christianity 113–117
 - Christology 114–115
 - evangelism 116–117
 - faith 115
 - gospel 116
 - government 119–121
 - home and family 117
 - science 118–119
- framework hypothesis 61–64
- gap theory
 - critique of proof-texts 57–60
 - fallacies 50–57
 - pre-Genesis gap 60
- geologic ages
 - based on evolution 48–49
 - contradict Genesis 47
 - impossible with global flood 66
- gospel
 - creation foundation 116, 164–165
 - everlasting 63, 170, 178
 - protevangel 63
 - urgency 167–168, 194
- government 119–121
- heaven
 - creationist testimony in 161–162
 - host of heaven 187–191
 - new earth 158–160
 - space 191–192
 - See also* firmament
- Jesus
 - See* Christ
- Jonah and the whale 213–215
- kind of created organisms
 - permanently distinct 36–38
 - testimony of Christ 140–141
- King, Christ as 126–129
- languages, origin of 31
- legal problems 179–182
- local flood theory 65–68
- Lucifer
 - See* Satan
- missions
 - See* evangelism
- nations, origin of 29–31
- natural selection
 - atheistic 97–104

- cruel process 96–99, 104, 107–108
See also evolutionism
- new earth 158–160
- Noah and the ark
 need for ark 67–68
 Noah's faith 185–187
- Passion Week and creation 141–147
- Passover observance 145–146
- progressive creationism
 fallacies 40–42
 H. Ross influence 106–107
- races, based on evolutionism 31–32
- recent creation
 biblical and theological reasons ... 76–82
 historical evidence 74–75
 scientific evidence 78–79
 supposed difficulties 85–88, 91–93
- rest on Sabbath day
 approved by Christ 141
 commemoration of creation 46, 77
 completion of creation 146–147
 length of seventh day 91–92
- Resurrection of Christ
 assurance of salvation 149
 essential in evangelism 150–152
 proven fact of history 214
 required power of Creator 147–148
 vital for revival 149–150
- revelatory-day theory 49–50
- Sabbath
See rest
- salvation
 faith required 115, 185–187
 only in Christ 100, 117
 Resurrection 149
 Word of God 205
- Satan
 dragon/dinosaur symbols 207, 210–211
 fall from heaven 52–53, 161
 opposition to gospel 168
 rebellion against God 126–127
- schools, creationism in
 legal problems 179–182
 opposition to teaching 177–179
- science
 dominion mandate 118–119
 founding fathers 118
 founded on creationism 118–119
 study of natural processes 192
- Second Coming of Christ 143–144, 160–161
- second law of thermodynamics
 biblical references 27, 155
 creation, evidence for 155
 definition 24
 deteriorating world 153–155, 199–202
- evolution, evidence against 38–39
- God's curse 26–28, 153
- spiritual deterioration 201–203
- ultimate death of earth 157–158
See also first law of thermodynamics
- sin
 Adam's fall 126
 cause of death 27–28, 51–52
 deliverance from 205–206
 unconcern of evolutionists 106–107
 universal experience 202
- six days of creation
 fourth commandment 45, 77
 geologic ages, contradictions with 47
 meaning of "day" 43–77
 parallels with Passion Week ... 141–147
 seventh day, length of 91–92
 works of 17–18
- space 20, 142, 191–192
- stars
 astrology and occultism 190
 distinct creations 37–38, 144
 number and variety 187–189
- sun
 Christ, type of 195–197
 God, evidence of 194
 harmful effects 201
 relative motion to earth 196
 source of earth's energy 196–197, 200, 201
- surveyor's line 193
- tabernacle 136
- theistic evolution
 fallacies 36–40
 progressive creation, preferable to 76
- theophanies 129–133
- thermodynamics
 science of all processes 197–198
See also first law of thermodynamics and second law of thermodynamics
- time
 component of space/time cosmos ... 192
 time's arrow
See second law of thermodynamics
- tomb of Christ, empty 214
- uniformitarianism
 contradictions with Genesis 47
 pre-diluvian 186
 unscriptural 78
- virgin birth of Christ 134–135
- Word of God
 eternal and perfect 203–205
 necessary in salvation 205
- young earth
See age; recent creation; six days of creation

Index of Names

Alabama University	101, 111	Klein, Martin J.	198
American Scientific Affiliation	75, 82, 111	Kulp, J. P.	68
Angrist, Stanley	199	Kurtz, Paul	11
Asimov, Isaac	11, 103, 189	Leupold, H. C.	86, 87
Barlow, Nora	108	Linnaeus, Carolus	118
Barr, James	85	Lockley, M. G.	209
Baylor University	111	Luther, Martin	167
Beck, Stanley D.	118	Lyell, Charles	68, 75, 109
Bible Science Association	112	Marx, Karl	32
Boudinot, Elias	120	Mattell, A. J.	96, 103
Boyle, Robert	118	Maxwell, J. Clerk	118
Brewster, James	118	Meeter, Merle	5
Brown University	111	Michaelmas	135, 136
Bryan, William J.	75	Moody, Dwight L.	173
Campus Crusade for Christ	176	Moore, James	109
Charles, Prince of Wales	88, 89	Monod, Jacques	96
Cherfas, Jeremy	108, 109	Morris, Henry M.	16, 28, 68, 75, 77, 78, 82, 112, 121, 148, 174, 175, 176, 177, 212
Chicago University	102	Newton, Isaac	84, 118
Child Evangelism Fellowship	173	Nitecki, M. H.	101
Christmas	135–136, 138–139	Northwestern University	98, 107
Colorado State University	103	Notre Dame University	111
Cooper, Bill	209	Ostrander, Gilman	119
Cornell University	101	Paley, William	107
Cuvier, Georges	75	Parker, Gary E.	78
Cox, Ralph	108	Pascal, Blaise	118
Creation-Deluge Society	75, 111	Pasteur, Louis	118
Creation Research Society	112	Potter, Van Renssalaer	154
Cremin, Lawrence	120	Provine, William B.	101, 102
Croft, L. R.	109, 110	Princeton University	111
Darwin, Charles	75, 99, 102, 106, 108, 109, 101, 110, 169	Pun, Pattle, P. T.	82
Darwinian Centennial	102	Rachels, James	101, 102, 103
Eddington, Arthur	154	Rawlings, Christopher	99
Einstein, Albert	154, 198	Ray, John	118
Evolution Protest Movement	75, 112	Religion and Science Association	75, 111
Faraday, Michael	118	Renfrew, Colin	84
Foster, Marshall	120	Rifkin, Jeremy	154, 155
Gillette, D. D.	209	Rolston, Homer, III	103, 104
Gish, Duane T.	174, 176	Ross, Hugh	106, 107
Gould, Stephen J.	84, 85, 99, 103, 107, 208	Ruse, Michael	97, 98, 100, 110, 111
Graham, Billy	173	Russell, Bertrand	153, 154, 155
Guelph University	97	Salford University	109
Harvard University	110, 111, 169	Scopes, John	75
Hitler, Adolph	32	Smith, Mary Ruth	5
Hull, David L.	98, 99, 107	Southern Methodist University	111
Huxley, Julian	102, 103	Stone, Irving	108, 109
Institute for Creation Research (ICR)	82, 106, 171–177, 181	Stoner, Don	106
Islam	114, 147	Strong, James	81
John, Laurie	96	Swanson, Mary-Elaine	120
Judaism	114, 147	Ussher, James	83–84
Jurassic Park	207, 211	Vardiman, Larry	5
Kelvin, Lord	118	Victoria Institute	111
Kepler, Johann	118	Westminster Abbey	108
		Wheaton College	82
		Whitcomb, John C.	68

Wilson, Edward O.	110, 111	Yale University	111, 169
Wiseman, P. J.	16		
Wycliffe, John	173		

Index of Scripture

GENESIS

1	17, 42, 46, 45, 50, 56, 57, 59, 63, 85, 86, 88, 91, 104, 140, 191	2:5	20, 68, 186
1, 2	74, 121	2:7	17
1-11	61, 62, 64, 70, 121	2:10-14	20
1:1	17, 46, 50, 54, 55, 56, 57, 58, 60, 113, 114, 126, 131, 142, 145, 148, 155, 191, 199	2:12	186
1:1-2	50, 57, 60	2:15	143
1:1-2:3	16	2:16-17	148
1:1-5	37, 57	2:18-25	117
1:2 ..	50, 51, 52, 54, 55, 56, 57, 58, 59, 142	2:19	86
1:3	56, 142	2:19-20	105
1:3-31	50	2:20	87
1:4, 10, 18, 21, 25, 31	20	2:24	63, 86, 140
1:4, 18	19	3	104
1:4-5	159	3-11	23
1:5	44, 87, 91	3:5	80, 126
1:7	20	3:6	141
1:8	20, 191	3:14-19	49
1:9-10	143, 159	3:15	28, 63, 134
1:10	53	3:17	27, 38, 77, 105, 141, 158, 164, 214
1:11-12	143	3:17, 19	27
1:14, 16	79	3:17-18	90
1:14-16	191	3:17-19	202
1:14-19	37, 45	3:17-20	148
1:16	56, 194	3:19	92, 153
1:16-19	19	3:24	161
1:17	19	4:17	51
1:20	20, 191	5	63, 70, 71, 72
1:21	17, 18, 90, 145, 199, 208	5:1-6:8	16
1:24, 26	88	5, 10, 11	62
1:26	79	5:24	131
1:26-27	146	5:29	72
1:26-28	117	6-9	65, 67, 68, 212
1:27	17, 63, 86, 126, 140, 151	6:1-4	63
1:28	57, 85, 89, 105, 199	6:4	51, 185
1:28-30	143	6:5	213
1:29-30	20, 89	6:8	186, 213
1:30	105, 141	6:9	16, 131, 185, 212
1:31	26, 49, 53, 56, 60, 76, 77, 90, 105, 141, 146, 158, 202	6:11	185
1:31-2:4	23	6:13	68, 213
2	63, 85, 86, 104, 140	6:15	67
2:1	19, 26, 55, 146, 191	6:22	186
2:1-3	25, 27, 55, 147	7:1	187, 213
2:2	92	7:3	67
2:2-3	105	7:5	186
2:3	16, 38, 46	7:11	21, 68
2:3-5:1	16	7:16	213
2:4	16, 45, 46	7:19-20	67
		7:21-22	28
		7:22	90
		7:22-23	212
		7:23	28
		8:4	212

8:5	67
8:22	29
9:1	30
9:1-2	119
9:3-4	89
9:6	30, 90, 119
9:11	68
9:13	68
9:18-19	30
10	63
10:1-32	30
10:8-12	30
10:10	62
10:25	71
11	62, 63, 70, 71, 72
11:1-9	30
11:4	30
11:9	31
11:18	71
11:26-32	63
12	14, 61
12:7	131
17:1	131
18:1	131
18:19	117
22:17	188
26:2	131
29:35	124
32:30	131
49:10	124
50:26	148
EXODUS	
3:2-6	132
17:6	146
20:11	49, 55, 56, 73
20:8, 11	91
20:8-11	45, 77, 87
21:28	90
31:17	38, 46, 62
31:17-18	77
31:18	16
33:20	130
LEVITICUS	
17:11	90, 105, 145
DEUTERONOMY	
4:5-8	119
8:3	196
32:8	31, 62
34:10	131
JOSHUA	
24:2	62
24:15	95
JUDGES	
6:22	131
13:21-22	131
1 KINGS	
18:21	95

2 KINGS	
19:15	62
1 CHRONICLES	
1:1-28	62
1:1-4, 24-27	72
16:25-26	122
2 CHRONICLES	
6:18	127
NEHEMIAH	
9:6	25, 27, 62, 127
JOB	
9:5-9	62
12:15	62, 68
12:7-8	89
25:5	144
26:7-13	62
31:33	62
38-41	121
38:4-7	62
38:7	53, 189
38:26, 41	91
39	90
39:19, 27	91
40:15-24	208
40:17	208
40:19	208, 211
40:24	208
41:1-34	208
41:7	208
41:10	211
41:15-17	208
41:21	208
41:26-29	208
41:34	211
42:5	131
PSALMS	
2:1	128
8:3-8	62
8:6-8	121
19	191
19:1	170, 188, 191, 194, 204
19:2	192, 194
19:3	193
19:4a	193
19:4b	194
19:5	194
19:6	191
19:6a	195
19:6b	197
19:7, 8, 9, 14	204
19:7-9	203
19:10	204
19:11	204
19:12-13	204
19:13	205
19:14	206
22:15	146

24:10	127	14:12-15	52
29	62	14:13	211
29:10	127	14:13-14	126
33:1, 6	123	14:15	211
33:6-9	62	24:1	58
37:5-11	183	24:6	201
40:7	134	27:1	208, 211
47:7	127	34:13	208
65:8	196	40:6-7	38
74:12	127	40:26	25, 27, 62
74:14	208	45:7	59
78:69	156	45:17	58
90:2-3	62	45:18	58, 59, 62
95:2, 5-6	123	51:6	27, 38, 155
95:3	129	52:14	146
100:3	129	54:9	62
100:3-4	123	55:9	188
100:3-5	162	65:17	148, 158
102:25-26	155	65:25	91, 105
102:25-27	27	66:22	148, 158
102:26	28	JEREMIAH	
103:20	190	2:26-27	129
104	62	4:14, 22, 31	58
104:4, 5	53	4:23	58
104:5	156	10:7	127
104:26	208	10:10	127
115:16	151, 188	10:11-13	62
119:89	82	15:16	204
119:105	206	30:7	58
119:130	168	31:22	135
136:3-7	123	31:35	62
138:2	203	33:22	187
139:14	123	51:15-16	62
147:7-8	123	EZEKIEL	
148:1-5	62	1:10	161
148:3-6	156	1:26, 28	131
148:5	123	10:14	161
148:5-6	25, 27	14:14, 20	62
PROVERBS		28:11-17	52
1:7	216	28:14	161
8:22-31	62	28:15	126
30:24-31	89	28:15-17	52, 161
ECCLESIASTES		28:17	126
1:4	156	34:25	105
1:9-10	27	DANIEL	
1:14	46	4:37	127
3:14	157	11:37-38	210
3:14-15	27	12:2-3	190
SONG OF SOLOMON		12:3	156
5:16	133	HOSEA	
ISAIAH		2:18	91, 105
7:14	130, 135	AMOS	
6:1	131	5:8	62
9:6	135	6:1	168
9:6, 7	129	9:6	62
11:6-9	105	JONAH	
14:12	211	1:17	213

2:10	212	28:6	212
MICAH		28:18–20	116, 121
1:8	208	28:19, 20	159
5:2	130, 132, 196	28:20	170, 181
5:6	62	MARK	
ZECHARIAH		2:27	141
5:11	62	4:13	163
9:9–10	142	4:16	164
14:16	127	9:48	202
MALACHI		10:2–9	63
1:3	208	10:6	77, 79, 140, 151
1:14	127	10:6–9	214
4:1	201	11:12–14	142
4:2	194, 195, 201	11:15–19	143
MATTHEW		11:19–24	143
1	71	12:1–11	143
1:21	132	13	143
1:23	130	13:19	63, 80, 140
4:23	116	13:31	157
5:38, 39	39	14:1	144
5:45	141	14:2	145
6:24	95	14:3–9	145
6:26	141	14:10–11	145
7:16–18	140	14:12–17	145
7:18, 20	10	16:15	168, 181
8:28–32	190	LUKE	
10:29	40	1:35	135
12:40	147, 214	1:69–70	81
13:6	170	2:8	135
13:20, 21	170	2:9	136
13:35	60, 81	2:10	136
15:36–37	124	3	71
16:4	215	3:34–38	72
16:21	147	4:4	186
16:26	97	8:11	163
19:3–6	63, 117	8:13	164
19:4–5	86, 140	9:31	144
19:6	140	11:32	214
21:1–9	142	11:50	80, 81
21:28–32	143	11:51	63, 79
21:33–43	143	12:6	90
22:30	190	17:26	185
23:35	63	17:26–27	63
24	143	17:27	60, 68
24:15	214	17:28–30	214
24:21	81, 140	19:14	85
24:35	155, 203	19:39–40	142
24:37, 39	212	20:9–18	143
24:37–42	63	21	143
24:38–39	60	21:11	190
25	143	21:33	157
25:34	80, 81	21:37	144
26:6–13	145	21:37–38	144, 145
26:14–16	145	23:31	146
27:46	146	23:45	146
27:50	147	23:54–56	147
27:51	146	24:27	117

24:30	159	2:23	146
24:43	159	2:25–31	166
JOHN		2:34–36	166
1:1, 3	116	3:20–26	166
1:1, 3, 14	133	3:21	81, 158
1:1–3, 10	79	4:10–12	166
1:1–3, 14	138	7:2–4	63
1:3	214	7:48–51	166
1:3, 5	200	8:30–36	166
1:8	195	10:43	166
1:9	194, 200	13:5	166
1:10	138	13:14–15	166
1:11–12	139	13:32–40	166
1:14	132, 136, 160	14:1	166
1:18	125, 131, 132	14:11–18	116
1:29	145	14:15	63
1:49	127	14:15–17	166, 170
3:14	146	14:17	164
3:17	137	17:1–3	116
3:19	194	17:2–3	166
3:29	195	17:10–11	166
4:14	146	17:15–34	151
5:17	46, 92	17:22–31	116
5:46–47	151	17:23–25	151
8:12	136, 146, 194, 201	17:24	63
8:24	133	17:24, 31	139
8:36	165	17:24–27	166, 179
8:44	63, 80	17:25	127
10:35	73	17:26	31, 63
11:25	146	17:27	79, 180
12:1–8	145	17:27, 28	201
12:20–50	144	17:30	151
12:35	144	17:31	134, 151
12:43	85, 168	18:4	166
12:46	144	18:28	166
12:48	204	19:8	166
14:6	126, 146	22:24–29	181
14:19	153	25:7–12	181
14:21–23	132	26:8	151
15:1	146	26:32	181
15:7	206	ROMANS	
15:15	132	1:16	168
15:16	206	1:20	81, 128, 170, 192, 215
17:17	168	1:20–21	124
17:24	141	1:21–22, 28	122
19:14	145	1:22–23	128
19:28	146	1:25	114, 126, 128
19:30	146	1:28	128
20:17	159	2:15	205
20:19	159	3:3–4	128
20:27	159	3:4	73
20:31	116	3:20	205
ACTS		3:23	194
1:3	133, 214	5:8	77
1:8	121, 165	5:12	17, 21, 28, 46, 49, 60, 77, 90, 105, 148, 214
1:9–11	159	5:12–19	62
2:16–21	166		

6:14	206
6:23	77
7:21–25	27
7:23	202
8:2	202
8:18	160
8:18–23	149
8:18–25	62
8:19	160
8:20, 22	214
8:20–22	27, 77, 92
8:20–23	49
8:21	28, 38, 153, 155, 158
8:21–22	202
8:22	21, 26, 80, 104, 105, 146, 155
8:24	216
10	103
10:10	167
10:13–18	193
10:18	193
10:9–10	207
13:13	201
1 CORINTHIANS	
1:18	100
2:9	160
3:7	182
4:9	53
5:5	205
5:7	146
6:3	53
11:7–12	62
14:8	60
14:33	49
14:40	40
15:1–2	149
15:1, 3–4	168
15:1–4	116
15:3–11	149
15:12–19	149
15:20, 26	148
15:20–28	149
15:21	66, 77
15:21–22	49
15:21–22, 35–41, 45–57	62
15:29–34	149
15:35–39	149
15:38	149
15:38–39	37
15:40	37
15:40–41	149
15:41	37, 188
15:42, 44	38
15:42–49	149
15:44	159
15:45	134
15:50–57	149
15:54	146

15:58	149
2 CORINTHIANS	
4:3	167
4:4	127, 167, 183
4:6	59
5:17	59
5:20	121
10:3–5	178
10:4	183
10:4–5	206
10:5	183
11:3	62
11:4	114
GALATIANS	
1:4	23
1:6	116, 168
3:13	146
4:4–5	137
EPHESIANS	
2:2	127
2:4–7	159
2:7	153
2:8–9	40
2:10	124
2:12	127
3:9	79, 132
3:10	53
4:10	160
4:29	206
5:11	201
6:4	117
6:13–17	181, 183
6:17	168, 181
PHILIPPIANS	
2:5	139
2:6	132
2:7	132, 136
2:8	138
3:20–21	159
4:8	211
COLOSSIANS	
1:13–14	127
1:15	132
1:16	79, 115, 122, 127, 134, 161, 214
1:16–17	24, 27, 165, 170
1:16, 20	145
1:16–20	115, 116
1:17	92, 115, 197
1:17–18	152
1:20	115, 122, 165
1:23	116
2:7	164
3:4	161
3:16	207
3:23–24	121
1 THESSALONIANS	
4:16–17	160

5:7	201	1:22	205
2 THESSALONIANS		3:2	206
2:16	147	3:8	206
1 TIMOTHY		1 PETER	
1:15	137	1:3	216
1:17	127, 131	1:12	53
2:1-4	179	1:19	134
2:13-15	62	1:20	79, 81
3:16	132	1:24-25	27, 203
4:4	89	2:13, 16	121
6:15	127, 128	2:21	139
6:16	127, 130, 194	2:24	142
6:20	170	3:5	128
2 TIMOTHY		3:15	177, 207, 216
1:10	136	3:18	134
1:12	168	3:20	63, 213
2:3	168	2 PETER	
2:24-26	182	1:19	156
3:16-17	203, 204	2:4-5	63
TITUS		2:5	60, 68
1:15	205	3:3-6	78
HEBREWS		3:5	142
1:2, 10	79	3:5-6	63, 215
1:2-3	25, 27, 207	3:5-7	25, 27
1:3	92, 132, 197	3:6	21, 59, 68, 212
1:10	81	3:7	92
1:14	53, 126, 190	3:8	43, 46
2:3	147	3:10	157
2:6-8	79, 121	3:10-13	148
2:17	132, 134	3:12	157
4:1-11	62	3:13	28, 158
4:2	205	3:16	92
4:3	17, 38, 80, 81	1 JOHN	
4:12	203	1:7	200, 206
4:15	134	1:9	206
5:9	147	2:15	127
6:19	161	3:12	63
7:25	134, 152	3:2	159
9:14	134	3:2-3	133
10:5	135	3:21-22	182
10:12	145	3:8	80
10:35-36	183	4:3	133
10:38	115	4:4	168
10:39	115	4:9	136, 138
11	63, 115, 187	5:16	205
11:3	115, 135, 187	JUDE	
11:7	68, 186, 187	6	63
12:1-2	195	9	161
12:2	138	11	63
12:16	97	14	63, 71
12:22	189	25	117
12:24	63	REVELATION	
12:27	27	1:5	148
12:29	201	1:8	152
13:2	190	1:12-16	133
JAMES		1:18	134, 147, 152
1:21	203	1:20	150

2-3	150	17:5	31
2:5	150	17:8	79, 81
2:7	162	17:14	128, 168, 183
3:14	63, 122, 150	18	63
3:14-22	150	19:16	128
3:15-16	96	20:8	168
3:15-17	150	20:9	160
3:18, 19	150	20:10	184, 211
3:21	150	20:11	157, 158
4:7	161	20:15	211
4:9-11	123, 127, 162	21	63, 121
4:11	63	21:1	148, 159
10:6	63	21:3	160
12	63	21:3-4	137
12:3, 9	207	21:4	27, 144, 148, 158
12:4	189	21:4-5	49
12:9	63, 126, 168, 190, 210	21:5	148, 158
13:3-4	210	21:23	202
13:4	207	21:27	212
13:8	79, 81	22	63, 121
14:11	202	22:1-4	162
14:6-7	63, 116, 122, 170, 179	22:2	143
14:7	63	22:3	27, 28, 141, 148, 158, 159, 202
15:3	128	22:5	137, 144, 159, 195
16:8	201	22:11	201
17	63		

The Modern Creation Trilogy

Volume II

**Science
and
Creation**

The Modern Creation Trilogy

Volume II

**Science
and
Creation**

Dr. Henry M. Morris

Dr. John D. Morris



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Table of Contents

Introduction	9
1. The Scientific Case for Creation: an Overview	13
The Two Models	14
The Elusive Evidence for Evolution	19
2. Evolution Does Not Occur in the Here and Now	25
The Classification of Biological Organisms Today	26
The Unprogressive Nature of Biologic Change	29
The Twilight of Natural Selection	33
The Wistful Search for Good Mutations	38
Imperfections as Evolution	45
3. Evolution Never Occurred in the Long Ago	49
Fossils: the Alleged Proof of Evolution	50
Where Are the Evolutionary Transitions?	58
The Chordates and the Vertebrates	61
Alleged Transitional Forms	64
4. Neither Did It Happen in the Recent Past	73
The Horse Family Bush	73
The Tale of the Walking Whale	76
Men, Monkeys, and Missing Links	79
The Australopithecines	84
The Enigma of <i>Homo Erectus</i>	88
The Uniqueness of Human Language	91
5. Evolution Never Happened at All	101
Punctuated Equilibrium — Evolution's Last Stand	101
Evolutionary Stagnation	109
The Need for Extinctions	111
Living Fossils	113
Dinosaurs and Dragons	120
6. Evolution Is Not Even Possible	125
The Law of Cause and Effect	125
The Laws of Thermodynamics Versus Evolution	127
The Vacuous Open-System Argument	138
Criteria for a Growth Process	141
Order through Chaos and Dissipation	150
The Ubiquitous Entropy Principle	158
7. The Probability of Life Is Zero	161
The Probability Barrier	162
Zero Probability	168

	The Improbability of Any Kind of Order	170
	Life and the Second Law	175
	Complexity and Cosmic Bootstraps	184
	Conditions in the Primeval Soup	191
	Rampant Speculation	193
8.	The Heavens Don't Evolve, Either	203
	Creation and the Cosmos	203
	The Supposed Evolutionary Big Bang	206
	The Inflationary Universe	208
	Problems with the Big Bang	211
	Cosmic Fantasies	220
	Mysteries of the Heavenly Bodies	227
9.	The Circumstantial Evidences Say No to Evolution	233
	Vestigial Organs — Useful After All	233
	Evidence from Embryos.....	235
	The Witness of Biogeography	237
	The Insignificance of Similarities	239
	Chaotic Genetics	241
	The Unstandard Time of Molecular Clocks	247
	Junk DNA and Vestigial Genes	251
10.	The Rocks and Fossils Tell of Sudden Death.....	257
	Return to Catastrophism	258
	Surprising Testimonies of Catastrophism	263
	Stop Continental Drift	269
	One Worldwide Cataclysm	273
11.	The Geologic Ages Are Vanishing	285
	Circular Reasoning in Geology	287
	The Supposed Order of the Fossils	298
	Anomalies in the Evolutionary Order	300
	The Anomalous Climates of the Ancient World	308
12.	Really, How Old Is the Earth?	313
	The Beginning of History	314
	The Human Population	317
	Radiocarbon and the Young Earth	320
	The Decaying Magnetic Field.....	322
	Decaying Comets	326
	Down to the Sea	328
	The Uncertain Sound of Radiometric Dating.....	333
	Index of Subjects	337
	Index of Names	340

Introduction

This second volume of *The Modern Creation Trilogy* focuses especially on the evidences from science that relate to origins. Today, literally thousands of scientists have abandoned the evolutionary model of origins, believing that true science supports the concept of primeval special creation. Furthermore, they are convinced that the Creator is not some impersonal “force” or “cosmic consciousness,” as pantheists would allege, but rather an omnipotent, omniscient Person, capable of simply calling the majestic universe into being by His own power and wisdom. That being the reality — or, at least, the premise — it follows that the Creator would have a purpose in so doing, and would be capable of ordering and preserving the universe thus created, and that all creatures are under the ultimate authority of that Creator.

Although there are many today who would insist that a scientist — by definition — cannot believe in special creation, the fact remains that there are indeed thousands of creationists today who would satisfy every definition of a scientist except *that!* They may reject evolution, but they do have bona fide post-graduate degrees in some field of pure or applied science from accredited universities; they have published scientific research papers in their fields; and they make their living by practicing or teaching science.

For example, since its organization in 1963, over a thousand such scientists have become members of the Creation Research Society. This is an American society, but there are similar organizations in England, Germany, Russia, Australia, the Netherlands, and various other countries. The Creation Science Society in Korea is essentially as large as the Creation Research Society in America. In addition, there are probably at least a hundred *local* creation societies active in both this and other countries, almost all led by scientists rather than by preachers or others.

Furthermore, our experience would confirm the fact — even though no actual statistics are available — that there are several times more creationist scientists outside, than inside, the membership of some

organized creationist associations. We believe, too, with good reason, that there are a great many scientists who are “closet creationists,” but who will not admit it because of peer pressure.

Many of these creationist scientists — including one of the writers (H. Morris) — were once evolutionists. In order to become creationists despite the opposition of their colleagues, they have had to examine the scientific evidences on both sides of this vital issue very carefully, and they have made an informed decision that the creation model of origins is a better scientific model than the evolutionary model. Creationism correlates the known facts of science far better than evolutionism, with fewer unresolved problems.

Now, even though special creationism is clearly taught in the Bible — as shown in Volume 1 of this Trilogy — it can be defended and expounded scientifically without reference to the Bible. It is *not* true that creationism is purely biblical, rather than scientific, as evolutionists often maintain. Creation is no more “religious” than evolution — in fact, *less* so! And evolution is no more “scientific” than creation — in fact, *less* so! Schools could very easily teach scientific creationism with no reference whatever to the Bible or to other religious literature or religious doctrine.

That, in fact, is precisely the purpose of this volume. Just as Volume 1 of the Trilogy explained and defended the *biblical* doctrine of creation without reference to scientific evidence or arguments, so this Volume 2 will set forth the scientific case for creation without reference to the Bible or to any aspect of religion.

Some may complain that the very idea of creation is religious and therefore non-scientific. Surely, however, any fair-minded person can see that evolution is as much a “religious” concept as is creation. Neither model can be *proved*, in the ultimate sense, or even tested scientifically, for the obvious reason that one cannot repeat history in the laboratory, nor can one *observe* actual past history from some imaginary time-machine. Both models of origins are beyond the reach of the scientific method! It is nothing but self-serving prejudice for evolutionists to assert that evolution is *science* just because it denies or ignores the possibility of God, whereas creation is *not* science because it allows that possibility.

In any case, this volume will discuss the evidences from the various sciences that relate to origins. Such evidences are found not only in biology, but also in geology, astronomy, physics, chemistry, and practically every other field of science. We cannot *prove* creation scientifically, but neither can evolutionists prove evolution. We *can* show, however, that the scientific data correlate better with the assumption of creation than

with the assumption of evolution, and we can do so without any reference to the Bible.

Furthermore, this can be done without having to rely overmuch on technical jargon. Scientists can, indeed, pursue these topics in much greater depth than we shall do here, but that is not the purpose of this book. It is important that people of all backgrounds — not just scientists — become aware that the real facts in this world (call them science, or whatever) support the real fact of a personal Creator God, to whom all men and women are responsible; for this knowledge should make a real difference in how they order their lives. Consequently, we shall try to explain the relevant scientific evidences in terms understandable and meaningful even to non-scientists. One certainly does not need to be a credentialed scientist to understand the basic scientific evidences supporting creation and refuting evolution. Whenever scientific terms or concepts need to be introduced into the discussion, we shall try to define and explain them in simple terms.

The evolution model, of course, attempts to include everything within its scope, from elementary particles to the most complex inter-relationships in the world of living organisms. So does the creation model. Accordingly, this volume must attempt to cover the origin and development of the universe, of plants and animals, and of human societies, and all of the various systems in between. The subject matter must cover the whole range of reality and, therefore, must necessarily be presented only in summary form. Nevertheless, the key evidences will become clear enough, even with this light treatment.

We trust that, when the survey is completed, the reader will agree with thousands of other scientific creationists, that the scientific case against evolution (and, therefore, for creation) is very strong! Since neither creation nor evolution can be *proved*, one's decision will finally be based on what he or she *prefers* to believe. For those who *want* to believe in creation, however, the evidence is far more than adequate to justify ordering their lives in the light of the *overwhelming evidence for special creation*.

Since no scientist — including the writers — can be directly trained and experienced in every field of science, all the arguments and evidences in this volume are documented by citations from scientists who *are* specialists in the particular fields being discussed. Furthermore, in order not to prejudice the case, all such quotations are from books or articles by evolutionary scientists. Since creationists are sometimes charged by evolutionists to be quoting them out of context to make them sound like creationists, we want to assure our readers, at the outset, that all

authorities cited are definitely evolutionists! Occasional exceptions are noted as appropriate.

Sources are also given so that readers can refer to them directly if they wish. It is impossible, of course, to quote enough of the context in each instance to give the authors' full treatment, but we have tried to give enough quoted material to indicate accurately the points being made by the respective authors.

Chapter 1

The Scientific Case for Creation: an Overview

Before discussing the detailed scientific evidence relating to origins, it will be good to get a broad overview of the basic facts involved. It is not too much to say that there is literally no scientific evidence whatever — past, present, or future — for any real evolution. Belief in evolution is strictly a matter of faith.

That is a bold statement, and readers will have to judge for themselves after they have seen the evidence. And that, of course, is exactly the point. If evolution is true, then we ought to be able to *see* the evidence. After all, *science* means “knowledge,” something that is *known* (the word comes from the Latin *scientia*, meaning knowledge).

But no one has ever *seen* evolution take place. The changes we do see in living species are either “horizontal” changes, at the same level of organized complexity (e.g., different varieties of dogs, different tribes of people, different colors of roses), or “downward” changes (e.g., mutations and extinctions).

Evolutionists may react to this problem by noting that creation can not be “seen” either, and they would be quite right. Real creation of some complex organism out of nothing, or even out of non-living matter, would indeed require a miracle.

Therefore, evolution and creation are on the same ground. Both must be seen with the eye of faith, because neither can be seen taking place with our physical eyes. But this very fact is a strong argument *for* creation and *against* evolution. One could very legitimately *predict*, from the creation model, that we cannot now see creation take place, since it is postulated as a supernatural event completed in the past.

The evolutionist, on the other hand, should expect actually to *see* evolution in action, since by definition it is an altogether natural process and, therefore, should be operating even now in nature. If we really *could* see things evolving from, say, a given species into another species of greater organized complexity, we would all have to believe in evolution. We could verify it by observing it — *that* would be real science!

But since we *cannot* see it functioning, it is not any more “scientific” than creation. Neither evolution nor creation can be seen in operation. Neither can be proved nor disproved, scientifically. It is conceivable that either one — or both — may have occurred in the past, but the past cannot be tested scientifically! A choice between the two can be made only by faith in one or the other.

The Two Models

The fact that we cannot *test* either belief scientifically, however, does not mean that we cannot *discuss* them scientifically. We can define two scientific models: a creation model and an evolution model. Then we can compare the two models in terms of their relative abilities to correlate and explain and, possibly, even predict scientific data. That way, we can arrive at a decision as to which model is *more likely* to be true, even though we can never *prove* it to be true. Which faith is the more *reasonable* faith — faith in a completed creation or faith in an ongoing evolution? If we can correlate and explain the origin of all scientific data in terms of present processes and phenomena, then evolution is reasonable. If, however, these data cannot be explained in terms of present natural processes, then one is justified in assuming that they require completed supernatural processes of the past, and this would make belief in creation the more reasonable faith.

We must use the term “model” or “framework” or “concept” or some other such term, rather than “theory” or “hypothesis” for both evolution and creation. In standard scientific terminology, a “hypothesis” is a statement that can be tested scientifically by some kind of experiment that could refute it if it is wrong. A “theory” is a hypothesis that has been repeatedly tested in various ways, but has not been refuted as yet. Finally, a scientific “law” is a theory that has been tested, with positive results, so often and in so many different ways that it is almost certainly a confirmed fact of science.

Nevertheless, careful scientists will generally agree that even a “law” of science may eventually turn out to be wrong if some experiment not yet performed might refute it. For that reason, no theory or law of science can ever be *proved* in the absolute sense, for even a single negative result in a properly conceived and controlled future experiment might yet disprove it.

With these standard principles of the scientific method in mind, it is truly amazing that so many *scientists* (not to mention the camp followers of science) will state pontifically that “evolution is a proved fact of science.” Stephen Jay Gould, for example, speaks of “our confidence in the fact of evolution.”¹ Gould is probably the most influential — certainly the most articulate — of the younger evolutionists, those of the “baby boom” generation. He is also the leading advocate of the modern “punctuated-evolution” school of evolutionary thought.

However, the pre-eminent living evolutionist is probably Ernst Mayr, professor of biology at Harvard, a representative of the older generation of evolutionists, and a leader of the evolutionary school of thought known as neo-Darwinism. Mayr has said this:

Since Darwin, every knowing person agrees that man is descended from the apes. . . . Today, of course, there is no such thing as the theory of evolution; it is the fact of evolution. . . . The only arguments now are over technical problems, but the basic fact of evolution is so clearly established that no scientist worries about it any more.²

With all due recognition of the brilliance and eminence of Professor Mayr, such a statement is pure propaganda. Surely he knows better!

Evolution is *not* a *proved fact* of science or history at all. It has never been observed, either scientifically in existing biological activity, or historically in the records of past biological phenomena, as we shall abundantly document later. Furthermore, evolution should not even be considered as a scientific hypothesis, since there is no conceivable experiment that could be devised which might refute it. Two incisive evolutionary biologists pointed this out more than a quarter century ago.

Our theory of evolution has become . . . one which cannot be refuted by any possible observations. . . . No one can think of ways in which to test it.³

1 Stephen Jay Gould, “Darwinism Defined: the Difference between Fact and Theory,” *Discover*, vol. 8 (January 1987), p. 65. Gould is a Professor of Geology at Harvard University.

2 Ernst Mayr, “Interview,” *Omni* (March/April 1988), p. 46. It may be noted that Dr. Ken Cumming, Dean and Professor of Biology at the ICR Graduate School, studied biology at Harvard under Dr. Mayr. Nevertheless, Cumming is now a strong and firmly convinced creationist, even after receiving his doctorate in biology at Harvard.

3 Paul Ehrlich and L. C. Birch, “Evolutionary History and Population Biology,” *Nature*, vol. 214 (April 22, 1967), p. 352.

If anyone objects to this generalization, let him try to devise an experiment himself that could disprove evolution. He will find it impossible. As Ehrlich and Birch express it:

Every conceivable observation can be fitted into it.⁴

No matter what one may see in an experiment, or in the world at large, he can always explain it, if he wants to badly enough, in terms of evolution. He can devise an evolutionary explanation for the long neck of the giraffe or the short neck of the hippopotamus. He can conceive how the bright colors of the butterfly or the dull coloration of the peppered moth might be explained by natural selection. If he sees no evolutionary change in an animal over many generations, he can say that evolution is *normally* represented by “stasis,” being interrupted by periods of rapid change occurring at such long intervals that we can never observe them, or else that evolutionary changes occur so slowly in such minute steps that no one can ever see them. *Anything* can be “explained” by evolution!

The preeminent professor of the philosophy of science Karl Popper pointed out that:

Agreement between theory and observation should count for nothing unless the theory is a testable theory, and unless the agreement is the result of attempts to test the theory. But testing a theory means trying to find its weak spots; it means trying to refute it. And a theory is testable if it is refutable. . . . It is far from clear what we should consider a possible refutation of the theory of natural selection.⁵

Evolutionists commonly respond to creationists who quote Popper by noting that he still believed in evolution. That, of course, is the point. One *believes* in evolution, but he does not *know* it to be true, except by faith — exactly the same way by which creationists *know* creation to be true. As a distinguished zoologist and Fellow of the Royal Society in England has said:

Belief in evolution is thus exactly parallel to belief in special creation — both are concepts which believers know to

4 Paul Ehrlich and L. C. Birch, “Evolutionary History and Population Biology,” *Nature*, vol. 214 (April 22, 1967), p. 352.

5 Karl Popper, “Science: Problems, Aims, Responsibilities,” *Proceedings, Federation of American Societies for Experimental Biology*, vol. 22 (1963), p. 964.

be true but neither, up to the present, has been capable of proof.⁶

Significantly, this admission was made by a prominent evolutionist selected to write the foreword to the 1971 edition of Charles Darwin's *Origin of Species*.

It is surely true, as Matthews says, that creationists must *believe* in special creation, just as evolutionists must *believe* in evolution. Creation is neither observable, testable, nor refutable. In the terminology of Ehrlich and Birch, "every conceivable observation" can be fitted into the creation model. Therefore, even though creationists "know" creation to be true, as Matthews says, they cannot prove it scientifically, any more than evolutionists can prove scientifically that evolution is true, no matter how strongly they may believe that they know it to be true.

It does seem, by any criterion of fairness and objectivity, that creation and evolution, as the only two models of origins, ought to be considered as equal alternatives to be evaluated objectively in terms of their relative abilities to correlate and explain scientific data.

In this book, therefore, we will be using the terms "creation model" and "evolution model" to denote these two alternative concepts of origins and history. A "model" can neither be proved nor disproved scientifically, but it can be evaluated scientifically in terms of its ability to correlate — and even "predict" — scientific data that can be actually observed or measured. The model can be defined in simple, broad terms to begin with, then modified and extended as necessary to incorporate incoming data. Then, in general, that model which incorporates the greatest number and variety of data, with the smallest number of modifications and extensions to make it fit, and with the smallest number of unresolved questions about how to incorporate the relevant data, is the model *most likely* to be *true*, even though it can never be proved scientifically to be true.

On this basis, we are convinced that the creation model is far superior to the evolution model, and we shall attempt to bring convincing evidence of that evaluation in the ensuing pages. First, however, we need to define the models.

In the very simplest terms, evolutionism is the model that attempts to explain everything without God the Creator, whereas creationism as a model advances the supernatural activity of the Creator as the explanation

6 L. Harrison Matthews, "Foreword" to *Origin of Species by Natural Selection*, by Charles Darwin (London: J. M. Dent and Sons, Ltd., 1971), p. x.

for the more basic entities of science and the most determinative events of history.

A more concrete comparison of the two models is summarized by some such tabulation as that below.

Evolution Model	Creation Model
<i>Continuing Naturalistic</i> Origin of Basic Systems	<i>Completed Supernatural</i> Origin of Basic Systems
Net Present <i>Increase</i> in Organized Complexity of Basic Systems	Net Present <i>Decrease</i> in Organized Complexity of Basic Systems

Another way of contrasting the two models is to emphasize that the evolution model stresses innovation and integration, whereas the creation model is characterized by conservation and disintegration. Therefore, one cannot properly speak of creation by evolution; each of the two terms is, by definition, the opposite of the other. Douglas Futuyma, a leading evolutionary biologist, has made this clear in a dogmatically anti-creationist book written by him.

Creation and evolution, between them, exhaust the possible explanations for the origin of living things. Organisms either appeared on the earth fully developed or they did not. If they did not, they must have developed from pre-existing species by some process of modification. If they did appear in a fully developed state, they must indeed have been created by some omnipotent intelligence.⁷

Creationists would certainly disagree with much in Futuyma's book, but we would heartily agree with this particular statement. That is, scientists can either explain all things by continuing natural processes, or they cannot — one or the other. If they cannot, then at least *some* things must be explained by completed supernatural processes of the past. The first situation would support the evolution model, the second the creation model.

Professor Futuyma was thinking specifically of biological organisms, but the same contrast would apply to the inorganic realm as well, including the physical cosmos itself. That is, if we can explain the development of the basic chemical elements, and the entire physical universe by ongoing, observable, natural processes, then we can properly believe in cosmic

⁷ Douglas J. Futuyma, *Science on Trial* (New York: Pantheon Books, 1983), p. 197.

evolution, stellar evolution, and chemical evolution. If not, then we should accept the creation model, attributing the origin of the universe, the basic structure of matter, the stellar heavens, and the solar system, to special creation.

The Elusive Evidence for Evolution

If evolution is really true, then we ought to be able to observe it in action. We should be able to observe new elements evolving, new stars evolving, new kinds of plants and animals evolving, and so on. If these things *could* be observed, then everyone would accept evolution as scientific fact. Even if we could not observe them actually coming into existence, if we could just observe simpler elements evolving into more complex elements, or invertebrates evolving into vertebrates, or anything of that sort, then we would all be evolutionists without even arguing. There might still be arguments between atheistic evolutionists and theistic evolutionists, but there could be no true creationists. All of us could actually see evolution taking place; it would be observable scientific fact!

We see nothing like this, of course, exactly as would be predicted from the creation model. Creation, by definition, is an event or events of the past, and so cannot be observed taking place in the present. Furthermore, instead of evolutionary changes now taking place to generate more complex systems and organisms, as might be expected from the basic definition of the evolution model, what we actually see is a ubiquitous tendency for systems to disintegrate and for organisms, and even entire species, to decay and die! This is another implication from the basic creation model.

Thus, the creation model basically is obviously more realistic than the evolution model. Its predictions are precisely fulfilled, whereas those of the evolution model are never observed at all.

At this point, however, the evolutionist flees for refuge to the safe haven of “time.” He assumes that evolution proceeds either so slowly or so rarely (in sudden leaps) that we can never actually see it operating.

In effect, he must so modify his basic model as to make it almost a quasi-creation model. He says that, even though we can’t see it, we must believe that it happened in the past. Otherwise, he would have to believe in creation, and to him such an option is incredible!

Not many modern evolutionists are willing to say this as bluntly as did Professor D. M. S. Watson many years ago, although this is what most doctrinaire evolutionists would say if it did not sound so bigoted. Watson asserted the following:

The theory of evolution itself [is] a theory universally accepted not because it can be proved by logically coherent evidence to be true but because the only alternative, special creation, is clearly incredible.⁸

Similarly, the eminent George Wald, a pantheistic evolutionist at Harvard, after showing that the spontaneous generation of life from non-life was essentially impossible, nevertheless said that he continued to believe in it because, as he put it:

The only alternative to some form of spontaneous generation is a belief in supernatural creation.⁹

And *that* Professor Wald could not endure!

Relegating evolution to the distant past, however, simply points up more clearly than ever the fact that evolutionism, despite its pretensions, is not science! Creationists are frank to admit that creation cannot be scientifically tested, because it took place in the past. Evolutionism is in exactly the same boat in this regard, but most evolutionists would choke before admitting it.

Furthermore, in order to make this idea palatable, evolutionists must attach it to an auxiliary model, that of *uniformitarianism*. The geological dogma of uniformitarianism is usually associated with the name of Darwin's fellow scientist and mentor, Sir Charles Lyell, although — like evolutionism — uniformitarianism is really a very ancient belief of pagan philosophers. The famous slogan of this doctrine is that “the present is the key to the past.” The assumption is that present processes (erosion, sedimentation, volcanism, glaciation, etc.), operating as they do at present, are sufficient to explain all the geological and other features of the earth.

This uniformitarian assumption, if valid, would mean that the earth must be very old! Since no instance of true “vertical” evolution has ever been observed during all of documented human history, the evolutionary time span needs to be almost infinitely great in order to make “particle-to-people” evolution seem even remotely feasible. Only three hundred years ago, both scientists and theologians in the Occident were satisfied with a few thousand years of earth history, since all human written records extended back only about 5,000 years or so. Such a young earth could not,

8 D.M.S. Watson, “Adaptation,” *Nature*, vol. 124 (1929), p. 233. Watson was a prominent British evolutionary zoologist.

9 George Wald, “Innovation in Biology,” *Scientific American*, vol. 199 (September 1958), p. 100. Professor Wald was a Nobel-prize-winning biologist, specializing in bio-optics.

of course, possibly allow for any measurable evolution, and so it became necessary for the radical social philosophers and others who were promoting evolutionary ideas to find ways of returning scholarly thought to the old pagan belief of an essentially infinitely old earth.

Lyell's uniformitarianism provided chronological encouragement for Darwin's evolutionism, and soon nearly the whole scientific world had capitulated to evolutionary uniformitarianism (see Volume 3 of this Trilogy for further discussion of the history of these developments).

But even Lyell's estimate of the great age of the earth soon proved inadequate for the time demands of the evolutionists:

The fact that the calculated age of the earth has increased by a factor of roughly 100 between the year 1900 and today — as the accepted age of the earth has increased from about 50 million years in 1900 to at least 4.6 aeons today — certainly suggests we clothe our current conclusions regarding time and the earth with humility.¹⁰

The author of this fascinating observation was, when he wrote it, professor of geology at California Institute of Technology and the Scripps Institute of Oceanography. He himself was, of course, an evolutionist who believed in the earth's great age. Nevertheless, he was aware of the unscientific assumptions in age speculations.

We will speculate a lot about the first aeon or more of earth's history . . . in the next few years; but in the foreseeable future it will be mostly speculation — essentially geopoetry.¹¹

This “geopoetry” is, nevertheless, presented as science by today's scientific establishment and their camp followers in the socio/humanistic fields. These tremendous ages are dependent entirely on the uniformitarian assumption as applied to a select few processes with very slow rates — especially the decay rates of certain chemical elements. Other processes are not acceptable as chronometers because, even with the assumption of uniformity, they will not yield ages big enough to accommodate evolution.

Now it should be obvious that no one can *prove* uniformitarianism to be applicable in prehistoric time, since there were no observers there to observe it. As a matter of fact, it is not valid even in historic time, for

10 A. E. J. Engle, “Time and the Earth,” *American Scientist*, vol. 57 (Winter, 1969), p. 461.

In this quotation, an “aeon” is a billion years.

11 *Ibid.*, p. 462.

it is well known that almost all geologic work today is being accomplished in brief “catastrophes” — floods, eruptions, earthquakes, landslides, tsunamis, hurricanes, etc.

Consequently, more and more geologists today are returning to the pre-Darwinian principle of *catastrophism* as the basis of geological interpretations of prehistoric geologic activities that produced the great features of the earth’s surface and subsurface formations. This is somewhat embarrassing to them, however, because catastrophism is more naturally associated with creationism than with evolutionism.

A prominent geologist has argued, for example, in a presidential address to his Society of Economic Paleontologists and Mineralogists that geologists should use the term “episodicity” instead of “catastrophism” when referring to these non-uniformitarian events of either past or present, because the latter term is too easily associated with creationism. He voiced his fear as follows:

What do I mean by “episodic sedimentation?” Episodic was chosen carefully over other possible terms. “Catastrophic” has become popular recently because of its dramatic effect, but it should be purged from our vocabulary because it feeds the neo-catastrophist-creation cause.¹²

Obviously, it is true that creationists are not embarrassed by any evidence of great catastrophes or even global cataclysms of the past, because creationism does not demand vast ages in which to function, as evolution does. By definition, creation does not operate within the natural laws of the present. It constitutes an absolutely unique supernatural event (or events), and can take place instantaneously at such time or times as the omnipotent Creator may choose. There is nothing at all unreasonable about this possibility, except to an atheist who chooses to reject the very strong evidence that such a Creator does exist. (At the very least, anyone should recognize that it is impossible to *prove* that there is no God!)

The great evolutionary protagonist Thomas Huxley admitted this back in Darwin’s day:

“Creation,” in the ordinary sense of the word is perfectly conceivable. I find no difficulty in conceiving that, at some former period, this universe was not in existence and that it made its appearance . . . in consequence of the volition of some

12 Robert Dott, “Episodic View now Replacing Catastrophism,” *Geotimes*, vol. 27 (November 1982), p. 16.

pre-existing being. Then, as now, the so-called *a priori* arguments . . . against the possibility of creative acts, appeared to me devoid of reasonable foundation.¹³

Now, although uniformitarianism in some form is absolutely essential to the evolution model, and catastrophism is more easily assimilated into the creation model, the creation/evolution issue is a different question than the catastrophism/uniformitarian issue. That is, the *fact* of creation is one scientific question; the *time* of creation is another, and the two should be kept distinct, as far as scientific comparisons go. Both questions can be discussed scientifically, without reference to any “religious” questions, and that will be done in this book, but they can also be discussed independently of each other.

In the earlier chapters of this volume, therefore, the scientific case *for* creation and *against* evolution will be elaborated. Then, in later chapters, we shall look at the evidence *for* catastrophism and *against* uniformitarianism. Finally, this will lead to the concept of a relatively young earth, instead of a very ancient earth. Creation is not only the true scientific key to a true understanding of the world and its history, but also to an understanding of a rather recent creation at that.

As noted earlier, it is not possible scientifically to *prove* either evolution or creation. Neither is it possible to *prove* whether the earth and universe are old or young. One must exercise faith in whichever one he or she chooses to believe, and this is not ultimately a scientific decision.

We maintain, however, that faith in creation is a *reasonable* faith, based on sound evidence, whereas faith in evolution is a *credulous* faith, exercised against all evidence! The choice has eternal consequences, one way or the other, and we would urge our readers at least to consider the evidence.

13 Thomas Henry Huxley, quoted in *Life and Letters of Thomas Henry Huxley*, ed. Leonard Huxley, vol. 2 (New York: Macmillan Co., 1903), p. 429.

Chapter 2

Evolution Does Not Occur in the Here and Now

We believe the creation model of origins correlates far better with scientific data than the evolution model. The evolution model suggests that natural processes can bring things into existence and organize them into more complex systems (innovation and integration). The creation model assumes that complex systems came into existence in the past and are being maintained as such in the present (conservation), except that if any “vertical” changes do take place, they necessarily must be in a “downward” rather than in an “upward” direction (disintegration).

In this chapter, we shall show that processes as they exist at present do not naturally “evolve” anything toward higher levels of organization. Things either remain at the same level, or go downhill toward disorganization, unless acted on by some outside organizer that itself had been organized previously (e.g., by human intelligence and skill). Always they bear witness to the principles of conservation or disintegration — not to naturalistic principles of innovation and integration. In other words, all existing processes support the creation model and testify against the evolution model.

In the next three chapters, we shall show that the records of past events give the same testimony. Then the chapter following that will show that the reason that there is no evidence of evolution in either the present or the past is because naturalistic evolution is impossible. The basic laws of all known natural science are laws of conservation and disintegration, exactly in accord with the creation model, and diametrically opposite to what would naturally be predicted from the evolution model.

The Classification of Biological Organisms Today

The obvious place to begin this comparison of model predictions is in the array of living plants and animals in the organic world today. This array is the present product of any past processes of evolution or creation, and so certainly should provide some clue to the nature of those processes.

However, to be truly objective at this point, we need to try as well as we can to empty our minds of any prior knowledge that we possess as to the characteristics of these organisms. We must try to make predictions strictly on the basis of the two models, and then, as it were, venture forth for the first time into the real world to find what is actually there!

The evolution model attempts to explain the entire organic assemblage in terms of natural descent from a common ancestor. Therefore the most obvious prediction from this model would seem to be that all such descendants should be essentially alike. Having come from the same ancestor by the same processes in the same world, there is no immediately apparent reason why any one of these descendant types should be different from any other.

It is not quite so simple, however. As the descendants multiply, they must necessarily occupy more space and, eventually, this space may become large enough to encompass more than one type of environment. Assuming that the hypothetical common ancestor somehow had the genetic capacity to vary from one individual to another (the origin of this variegated genetic “information” also needs to be explained, of course), then the gradually changing environments should elicit gradually diversifying descendants responding to those environments.

Therefore, the organic assemblage predicted by the evolution model need not be one of uniform sameness. However, it does seem that the model predicts at least a *continuum* of all forms of life. There exists a continuum of environments and a common ancestor and a common process of development. Therefore, there should be a continuum of organisms, and a classification system would be impossible.

That this is necessarily the fundamental prediction of the evolution model is obvious from the fact that the discrete gaps between the various kinds of organisms require further explanation. If there were no gaps, but only a continuum of organisms, no other explanation would be needed. Such a continuum, if it existed, would be properly considered an exceptionally clear evidence of past evolution.

The creation model, on the other hand, in its basic form, predicts that special creation, being purposive, would result in a discrete array of clear-cut distinct organisms, each with its own peculiar structure pro-

vided for its own particular functions. There would be many similarities, but also many differences. The creative process would have designed similar structures for similar functions and different structures for different functions. Since both fish and men would have need to see, for example, eyes would be provided for both; but fish would receive gills and men would receive lungs, corresponding to the particular environments in which they were created to function.

What, then, do we actually find in nature, a continuum of organisms, or an array of clear-cut kinds? Let the noted evolutionary geneticist Dobzhansky give the answer:

If we assemble as many individuals living at a given time as we can, we notice at once that the observed variation does not form any kind of continuous distribution. Instead, a multitude of separate discrete distributions are found. In other words, the living world is not a single array of individuals in which any two variants are connected by unbroken series of intergrades, but an array of more or less distinctly separate arrays, intermediates between which are absent or rare.¹

Professor Dobzhansky could well have ended this sentence with the words, “altogether absent.” In the evolution model, similarities (whether in anatomy, embryology, blood chemistry, or whatever) are predicted on the basis of common ancestry. In the creation model, the same similarities are predicted on the basis of a common purposive designer. Gaps and differences are likewise predicted by the creation model as the product of purposive design. Gaps and differences are not predicted at all by the evolution model, except on the basis of subsidiary hypotheses that must be introduced for this specific purpose. Thus, the very existence of a science of taxonomy is a *prediction* of creationism and a *problem* to evolutionism.

The classification system which we still use today (variety, species, genus, family, order, class, phylum, kingdom) was long ago developed primarily by the great biologist Carolus Linnaeus. This system is found by modern biologists to apply effectively to all the extinct plants and animals in the fossil world (the categories did not evolve!) as well as those in the present world. It is very significant, therefore, that Linnaeus was a creationist, and was attempting to show that the Creator had organized

¹ Theodosius Dobzhansky, *Genetics and the Origin of Species* (New York: Columbia University Press, 1951), p. 3, 4. This book is one of the classics of neo-Darwinism.

all organisms into these distinct categories for His own purposes, with the very existence of the gaps — rather than being an evolutionary “continuum” of organisms — serving clearly as a testimony to His creative purpose for each type of creature.

Yet today we have the anti-creationist Niles Eldredge expressing the following remarkably unwarranted assessment of this evidence:

This hierarchy of life — the pattern of interested resemblances interlinking all organisms — was perhaps Darwin’s best argument of all that life has evolved.²

One immediately notes that Dr. Eldredge in this evaluation speaks of the “interested resemblances,” but ignores the far more significant *differences*. He does, however, at least acknowledge that even the resemblances are good evidence for a common designer. They by no means need to be explained by evolution from a common ancestor. Here is what he says about that:

Indeed, the only competing explanation for the order we see in the biological world, this pattern of nested similarity that links up absolutely all known forms of life, is the notion of Special Creation: that a supernatural Creator, using a sort of blueprint, simply fashioned life with its intricate skein of resemblances passing through it. . . . And, of course, it was precisely this notion of divine Creation that furnished the explanation for all life — its very existence, its exuberant diversity and its apparent order — in Darwin’s day.³

A creationist could hardly have said it better. Then, when the ubiquitous differences are brought into the discussion, these clear-cut gaps between the categories (especially at the family level and higher), this complete absence of an evolutionary “continuum” in the organic realm becomes an all but compelling argument for creation. No wonder Eldredge must acknowledge that the original systematic biologists, like Linnaeus, were creationists:

And though a few of these 18th-century systematists had vaguely evolutionary notions, nearly all were devoutly and orthodoxly religious. They saw the order in their material, the

2 Niles Eldredge, *Time Frames* (New York: Simon and Schuster, 1985), p. 45.

3 *Ibid.*, p. 29.

grand pattern of similarity running through the entire organic realm, as evidence of God's plan of creation.⁴

This evidence, of course, is one of numerous reasons why many modern biologists are also returning to belief in creation.

One of these, in fact, was selected to write the foreword to the special Centennial Edition of Darwin's *Origin of Species*. In this connection, he said:

Taking the taxonomic system as a whole, it appears as an orderly arrangement of clear-cut entities, which are clear-cut because they are separated by gaps. . . . The general tendency to eliminate, by means of unverifiable speculations, the limits of the categories nature presents to us, is the inheritance of biology from the *Origin of Species*. To establish the continuity required by theory, historical arguments are invoked, even though historical evidence is lacking. Thus are engendered those fragile towers of hypotheses based on hypotheses, where fact and fiction intermingle in an inextricable confusion.⁵

The author of this penetrating and perceptive analysis, Dr. W. R. Thompson, was for many years director of the Commonwealth Institute for Biological Control in Ottawa, Canada. As a very eminent and knowledgeable biologist, he deserved a far more respectful hearing than the evolutionary establishment was willing to give him. His facts, however, are indisputable.

The Unprogressive Nature of Biologic Change

Having considered the array of organisms, let us next consider the nature of the specific processes which have produced these organisms. Here we need to be more precise than merely to label them evolutionary processes or creative processes.

The evolution model should predict some sort of biologic process that impels simple organisms to advance into complex organisms. Particles have become molecules, and molecules have advanced to cells, and simple cells have progressed to become people. Though the process need not necessarily be continuous, since it has somehow presumably evolved particles into people, it must be there. As our hypothetical innocent scientist, entering for the first time into the real world, begins to study its

⁴ Ibid., p. 33.

⁵ W. R. Thompson, "Introduction" to *Origin of Species*, by Charles Darwin (New York: Everyman's Library, Dutton, 1956).

biologic mechanisms, his evolution model would make him expect to observe in action some powerful and pervasive process whose pressures lead inexorably to great advances in complexity and order.

Nothing in the basic model would tell him whether this process operates slowly or rapidly. The actual tempo of evolution would be unknown at first, but it must at least be rapid enough to be observable — else, how could it produce such near-infinite results in finite time? Furthermore, if it is not observable, it is beyond the reach of the scientific method. Absence of such a process must then be considered *prima facie* evidence that evolution is not scientific. If it operated exclusively in the past and cannot be observed in the present, then it is essentially in the same logical category as creation.

We must realize, too, that this process must not be one that merely shuffles things around at the same level, or one that may even lower the level of order and complexity. To account for the supposed development of all things from a common ancestor — say a protozoan or simpler organism — it must be essentially a process that insistently *increases* order and complexity. If we do find such a process clearly and regularly operating in the real world of experimental observation, it can rightly be considered as strong evidence for evolution.

The creation model predicts, on the other hand, that no such process will be observed at all. Since it presupposes that creation of all the basic kinds—including man, the most complex of all—was a completed event of the past, it says explicitly that no natural process of evolutionary development from a simpler kind of organism to a more complex kind of organism can be observed operating today.

On this test, the facts clearly favor the creation model. All biologists know that biological processes today are not producing more highly developed kinds. Actually, they used to call the fact that “like produces like” the biogenetic law.

Different varieties of plants and animals, at the same level of complexity, can easily be developed, either naturally or artificially, but that’s all. Sometimes, evolutionists call this phenomenon “micro-evolution,” giving the impression that with enough time, it could become “macro-evolution,” but this is either wishful thinking or intentional deception. Not the slightest evidence exists that this has ever happened or ever could happen. Therefore, the process should be called, simply, “horizontal variation,” or “recombination,” at the same level of complexity (e.g., change in color), but should not be termed evolution.

It therefore seems clear that, contrary to Darwin’s conception, most of the genetic variation in populations arises not

from new mutations at each generation but from the reshuffling of previously accumulated mutations by recombination. Although mutation is the ultimate source of all genetic variation, it is a relatively rare event, providing a mere trickle of new alleles into the much larger reservoir of stored genetic variation. Indeed recombination alone is sufficient to enable a population to expose its hidden variation for many generations without the need for new genetic input by mutation.⁶

Although the author of the above quotation is one of the nation's leading geneticists and a strong anti-creationist, his statement that the phenomenon of variation (or micro-evolution, as some would call it) is normally just recombination of existing genetic attributes is unintentionally confirming an implication of the creation model. A great deal of variation can take place in a species merely by reshuffling genes. *Mutations* (and we shall discuss these shortly) are necessary for real evolution, but these are very rare.

The creation model stresses conservation of the completed creation, and this implies that the Creator would initially build into each created genome a wide range of variability, enabling the specific creature to adapt to a significantly large range of environments without becoming extinct. That is, the phenomenon of "adaptation," often cited as evidence of evolution, is in reality evidence of conservation, rather than evolution. As two recent authors have recognized:

Although Darwinism is often declared to be dead, it refuses to lie down. Darwin did, however, mislead his audience in one way: his best-known work is much more about the origin of adaptations than of species. Since then, there has been much more progress in understanding the causes of adaptive change than of the mechanisms whereby new species are generated.⁷

The wide range of variability available in the population is also indicated as follows by Ayala:

In any case there can be no doubt that the staggering amount of genetic variation in natural populations provides ample

6 Francisco Ayala, "The Mechanisms of Evolution," *Scientific American*, vol. 239 (September 1978), p. 63. Ayala is a leading modern neo-Darwinian biologist.

7 J. A. Coyne and N. H. Barton, "What Do We Know about Speciation?" *Nature*, vol. 331 (February 11, 1988), p. 485.

opportunities for evolution to occur. Hence it is not surprising that whenever a new environmental challenge materializes — a change of climate, the introduction of a new predator, man-made pollution — populations are usually able to adapt to it.⁸

Ayala used the term “opportunities for evolution,” but it would be better to call it simply “adaptation,” or, still better, “conservation.”

No matter how much variation and adaptation may occur, the change is always “horizontal” at best, and the species remains the same species. In fact, as Gould and other paleontologists have shown, the species seems to remain in a condition of “stasis,” or evolutionary stagnation, through a thousand generations or more, even through periods of traumatic environmental change.

Some consider the phenomenon of polyploidy (the sudden doubling or quadrupling of genes in the chromosome) to be an example of speciation. At most, however, no new basic type is generated. Polyploidy applies almost exclusively to plants, and no “new” genes are produced by this process. Most books on evolution do not even mention it. When they do, it is usually called “variation.” It clearly contributes nothing to the overall evolutionary history of life.

Moreover, because species often maintain stability through such intense climatic change as glacial cycling, stasis must be viewed as an active phenomenon, not a passive response to unaltered environments.⁹

It does seem remarkable that “stasis” (meaning “remaining unchanged”) is now considered by many leading evolutionists to be the key factor in evolution, which process one would think meant “change” if it means anything.

Stasis, as palpable and observable in virtually all cases (whereas rapid punctuations are usually, but not always, elusive), becomes the major empirical ground for studying punctuated equilibrium.¹⁰

This is fascinating! According to the punctuationist school of thought among evolutionists, the actual evolutionary advances occur during the

8 Ayala, “The Mechanisms of Evolution,” p. 64.

9 Stephen Jay Gould and Niles Eldredge, “Punctuated Equilibrium Comes of Age,” *Nature*, vol. 366 (November 18, 1993), p. 223.

10 Ibid. See chapter 5 for further discussion of stasis.

“punctuations” in the equilibrium of a species. But since these are rarely observable (actually, *none* have been observed so far), the mechanism of evolution must be studied by researching the phenomenon of evolutionary stagnation, or *no* evolution. Remarkable!

The creationist is quite comfortable, of course, with the phenomenon of stasis, for that is actually what his model predicts. He is also comfortable with the very rare (actually non-existent) observation of evolutionary jumps, because this also is as expected. One could surely be justified in taking all this discussion of stasis and punctuations as a sort of grudging (or unconscious?) acknowledgment of the validity of creationism.

The orthodoxy, as is well known, advocated the fixity of species and acts of special creation — the first can be considered as an extreme form of stasis, the latter of jumps. Whereas Darwin himself hinted at the phenomenological similarity between special creation and evolutionary jumps, the implication of this similarity between stasis and the fixity of species should also be considered in the discussion of the development of his theory.¹¹

How sad for Charles Darwin! After receiving the adulation of multitudes of followers because he had provided a supposedly scientific alternative to the Creator, explaining the naturalistic origin of species without God, it turns out that the more advanced of his followers have gone full cycle, returning again to the arguments of the creationists, while not yet realizing that that is what they have done. All of Darwin's evidences turn out to be descriptions of creative adaptation, not origin.

Darwin, it has now become commonplace to acknowledge, never really addressed the “origin of species” in his book of that title.¹²

The Twilight of Natural Selection

Not only did Darwin fail to cite any actual case of the origin of a new species by natural selection (in fact, he couldn't because there haven't been any), but his proposed mechanism for doing this — natural selection — is now usually acknowledged to be tautologous as a supposed explanation for evolution. Its real value turns out to be as a conservative mechanism to keep species as they are, not allowing them to deteriorate and then become extinct.

11 Mirko Majer, “Evolution Again,” *Nature*, vol. 320 (March 6, 1986), p. 10.

12 Niles Eldredge, “Progress in Evolution?” *New Scientist*, vol. 110 (June 5, 1986), p. 55.

For many years, creationists have been pointing out the logical fallacy involved in attributing evolution to natural selection, stressing the inherently tautologous nature of the whole concept. That is, natural selection was supposed to insure “the survival of the fittest,” but the only pragmatic way to define “the fittest” is “those who survive.” Thus, the long neck of the giraffe and the short neck of the hippopotamus are both explicable by natural selection, as are both the dull coloration of the peppered moth and the brilliant colors of the bird of paradise. Natural selection “explains” everything, and, therefore, really *explains* nothing!

Creationists had posed a similar objection to the evolutionist’s concept of “adaptation.” The fact that a particular organism is adapted to its environment tells us nothing whatever about how it *became* adapted. Any organisms not so adapted would not have survived, but this constitutes no proof that the adaptations were produced by evolution. Creationists have never objected to the idea of natural selection as a mechanism for eliminating the unfit, non-adapted organisms. As a matter of fact, creationists long before Darwin were advocating natural selection as a *conservation* principle. The creationist Edward Blyth wrote on this subject at least 24 years before Darwin; and Loren Eiseley, a prominent modern evolutionist, has asserted that Darwin got the whole idea from Blyth. However, evolutionist Stephen Jay Gould has pointed out that *many* earlier creationists held similar views.

Darwinians cannot simply claim that natural selection operates[,] since everyone, including Paley and the natural theologians, advocated selection as a device for removing unfit individuals at both extremes and preserving, intact and forever, the created type.¹³

Failure to recognize that all creationists accepted selection in this negative role led Eiseley to conclude falsely that Darwin has “borrowed” the principle of natural selection from his predecessor E. Blyth. The Reverend William Paley’s classic work *Natural Theology*, published in 1803, also contains many references to selective elimination.¹⁴

As a screening device for eliminating the unfit, natural selection is a valid concept, and, in fact, represents the Creator’s plan for preventing

13 Stephen Jay Gould, “Darwinism and the Expansion of Evolutionary Theory,” *Science*, vol. 216 (April 23, 1982), p. 380.

14 *Ibid.*, p. 386.

harmful mutations from affecting and even destroying the entire species. And that is *all* it does! Yet evolutionists, especially Darwinians and neo-Darwinians, have long insisted that it somehow “creates” new, better adapted, more fit species.

Creationists have often pointed out that the one concept that Darwin’s book *The Origin of Species by Natural Selection* did *not* discuss was the origin of species by natural selection! Darwin’s evidences had to do with *varieties*, not *species*, and all else was conjecture. The leading British evolutionist Colin Patterson has pointed out:

No one has ever produced a species by mechanisms of natural selection. No one has ever gotten near it and most of the current argument in neo-Darwinism is about this question.¹⁵

This “current argument in neo-Darwinism,” interestingly enough, is merely echoing the arguments against neo-Darwinism that have been advanced by creationists for many years. Evolutionist Gould says this:

The essence of Darwinism lies in a single phrase: Natural selection is the creative force of evolutionary change. No one denies that selection will play a negative role in eliminating the unfit. Darwinian theories require that it create the fit as well.¹⁶

Herein, of course, we encounter the impotence of natural selection not only to *produce* the fit, but even to *define* the fit! Any definition is bound to be tautologous, definition in a circle.

Now it is remarkable that in the 20 years preceeding 1995 practically all biologists have come to acknowledge this fact of redundancy. Natural selection is a force that somehow causes the survivors to survive. It enables those who adapt to adapt. Those who leave the most surviving descendants are the fittest to leave surviving descendants.

One of the most frequent objections against the theory of natural selection is that it is a sophisticated tautology. Most evolutionary biologists seem unconcerned about the charge

15 Colin Patterson, “Cladistics,” Interview on British Broadcasting Corporation television program on March 4, 1982; producer, Brian Leek; Interviewer, Peter Franz. Patterson is senior paleontologist at the British Museum of Natural History.

16 Stephen Jay Gould, “The Return of Hopeful Monsters,” *Natural History*, vol. 86 (June/July 1977), p. 28.

and only make a token effort to explain the tautology away. The remainder, such as Professors Waddington and Simpson, will simply concede the fact. For them, natural selection is a tautology which states a heretofore unrecognized relation: The fittest — defined as those who will leave the most offspring — will leave the most offspring.

What is most unsettling is that some evolutionary biologists have no qualms about proposing tautologies as explanations. One would immediately reject any lexicographer who tried to define a word by the same word, or a thinker who merely restated his proposition, or any other instance of gross redundancy; yet no one seems scandalized that men of science should be satisfied with a major principle which is no more than a tautology.¹⁷

The brilliant writer and vitalist philosopher Arthur Koestler has incisively described the quandary of the evolutionists — now widely acknowledged, but still mostly ignored:

Once upon a time, it all looked so simple. Nature rewarded the fit with the carrot of survival and punished the unfit with the stick of extinction. The trouble only started when it came to defining fitness. . . . Thus natural selection looks after the survival and reproduction of the fittest, and the fittest are those which have the highest rate of reproduction, . . . we are caught in a circular argument which completely begs the question of what makes evolution evolve.¹⁸

Evolutionary literature is filled with marvelous stories of how organisms came to be so well adapted to their environments. These “just-so-stories,” these fairy tales for intellectuals, are, of course, pure imagination. No evolutionist can predict the course of future evolution, but he delights in “retrodicting” the wonders of past evolution! The reader of such tales should always take them *cum grano salis*.

Paleontologists (and evolutionary biologists in general) are famous for their facility in devising plausible

17 Gregory Alan Pesely, “The Epistemological Status of Natural Selection,” *Laval Theologique et Philosophique*, vol. 38 (February 1982), p. 74.

18 Arthur Koestler, *Janus: A Summing Up* (New York: Vintage Books, 1978), p. 170.

stories; but they often forget that plausible stories need not be true.¹⁹

All one can learn about the history of life is learned from systematics, from groupings one finds in nature. The rest of it is story-telling of one sort or another. We have access to the tips of a tree; the tree itself is theory and people who pretend to know about the tree and to describe what went on with it, how the branches came off and the twigs came off are, I think, telling stories.²⁰

Nevertheless, as Koestler points out, even though the whole fabric of Darwinian and neo-Darwinian natural selection, as an explanation of evolution, is today in shreds, most intellectuals continue to hold it as an article of faith.

In the meantime, the educated public continues to believe that Darwin has provided all the relevant answers by the magic formula of random mutations plus natural selection — quite unaware of the fact that random mutations turned out to be irrelevant and natural selection a tautology.²¹

In the meantime, if one is interested in reading a thorough critique, sound both scientifically and epistemologically, of natural selection as a causative and explanatory factor in evolution, the analysis of Professor R. H. Brady, of Ramapo College, is recommended.²² Norman Macbeth, the Harvard lawyer whose 1971 book *Darwin Retried* was itself (even though not supporting creationism) a devastating critique of neo-Darwinism, says that one of Brady's papers "seemed to me to utterly destroy the entire idea of natural selection as presently conceived."²³

Despite all the evidence, however, there are still some ardent defenders of the Darwinian faith in gradual evolution through natural selection.

19 Stephen Jay Gould et al., "The Shape of Evolution: A Comparison of Real and Random Clades," *Paleobiology*, vol. 3, no. 1 (1977), p. 34.

20 Patterson, "Cladistics." Patterson is a leading exponent of the new science of cladistics, which attempts to categorize plants and animals without reference to any evolutionary histories.

21 Koestler, *Janus: A Summing Up*, p. 185.

22 Ronald H. Brady, "Dogma and Doubt," *Biological Journal of the Linnean Society*, vol. 17 (February 1982), p. 79–96.

23 Norman Macbeth, "Darwinism: A Time for Funerals," interviewed in *Towards*, vol. 2 (Spring 1982), p. 18. The title has reference to the author's conviction that Darwinism and neo-Darwinism will die as soon as their older advocates die.

Some of the most influential of these still-living neo-Darwinists are Ernst Mayr and Edward Wilson at Harvard, Michael Ruse in Canada, and Richard Dawkins in England.

These men and others have published very articulate and persuasive books, especially pointing out the inadequacies of the various proposed saltational and punctuated equilibrium evolutionary mechanisms as proposed by Gould and others. They have also developed some clever analogies and computer simulations, purporting to show how mutations and natural selection might possibly work to generate new species.

The fact remains, however, when one scrutinizes their writings carefully, they still have not provided any *real* evidence of *real* macroevolution, that is, of one species producing a *new* species. Just like Darwin's book, their own books fail to cite any examples of genuinely new and higher species being produced by natural selection. If anyone doubts this, he should just look and see for himself. True macroevolution simply is not occurring today, anywhere in the world, and no computer simulation, clever analogy, or imaginative just-so-story can produce one.

The Wistful Search for Good Mutations

We don't hear as much about genetic mutations today as we used to, though they remain the best hope for a genuine evolutionary mechanism. The problem is that all *observed* mutations seem to be an embarrassment to evolutionists, not an asset. The problem is, that in accordance with the creation model, they all seem to produce "devolution" instead of evolution. As noted before, Ayala acknowledges that fact thus:

Although mutation is the ultimate source of all genetic variation, it is a relatively rare event.²⁴

Mutations are rare, indeed. Even Richard Dawkins, as doctrinaire a neo-Darwinian as there is in the whole world, says:

In real life, the probability that a gene will mutate [that is, in one generation] is often less than one in a million.²⁵

Dawkins' reference to "real life" is in the context of his computer simulations of the mutation/selection process, which led to his famous

²⁴ Ayala, "The Mechanisms of Evolution," p. 63.

²⁵ Richard Dawkins, "Creation and Natural Selection," *New Scientist*, vol. 111 (September 1986), p. 37.

book *The Blind Watchmaker*. For these studies, he imposed a mutation rate of one each generation instead of one in a million generations, in order to speed up the process. He then had to *assume* that the mutation in each generation would be beneficial and, therefore, would be preserved through succeeding generations.

But if mutations are really rare, good mutations are very, very, very rare! Furthermore, they are quite random in their occurrence, in no way trying to respond to some specific “need” of the organism.

A mutation can be considered an error in the replication of DNA prior to its translation into protein.²⁶

The forces that give rise to gene mutations operate at random in the sense that genetic mutations occur without reference to their future adaptiveness in the environment.²⁷

Random errors, especially in an efficiently functioning organism, would not make it better or more complex. A “beneficial” mutation, even if natural selection is there waiting to conserve one if it comes along, is simply a figment of the evolutionary imagination. None has yet been documented in “real life” — that is, a mutation beneficial to the creature experiencing it. Even if one does occur in, say, every millionth generation, it would not mean much. The same mutation would probably have to occur simultaneously in the “mate” of the organism before it could hope to spread through the population. And that’s only *one* mutation in *one* gene. To produce real evolution in a real animal, there would have to be *multitudes* of such preserved beneficial mutations. The concept seems merely to be a commentary on the intense desire of evolutionists to avoid the Creator.

For at least a half-century evolutionists were supremely confident. The “evolutionary synthesis” promulgated by such leaders as Sir Julian Huxley, George Gaylord Simpson, Theodosius Dobzhansky, Ernst Mayr, J. B. S. Haldane, G. Ledyard Stebbins, Sewall Wright, Glen L. Jepsen, and others of similar stature, seemed to have solved all the major problems. The fossil record (allegedly) proved the *fact* of evolution, while mutations and natural selection (supposedly) provided the *mechanism*.

Creationists, however, kept on insisting that the fossil record showed no intermediate evolving forms, that natural selection was impotent and

26 Ayala, “The Mechanisms of Evolution,” p. 58.

27 Ibid., p. 59.

tautologous, and that mutations were all either neutral, harmful, or lethal, so that evolution still was based on no real evidence, either in the past or present. These cogent, scientific arguments were all simply ignored!

But now all this has changed. A new wave of evolutionists has appeared, and these younger scientists are now using all the old creationist arguments themselves — not questioning evolution, of course (*that* is sacrosanct!) — but seeking to change the standard evidences. The fossil sequences have largely given way to protein sequences, and the Darwinian mechanisms (mutations and natural selection) are now being superseded by hopeful monsters and random chance.

The neo-Darwinists are not giving up easily, however, and the waters of the evolutionary sea have become very turbulent.

Neo-Darwinism, of course, concluded that random mutations in the genetic systems of organisms provided the basic materials on which natural selection could act to produce new, better-equipped species. The problem, repeatedly emphasized by creationists, was that mutations are neutral or harmful, not helpful. At least that is true of all known mutations. Evolutionary theory regarding past mutations tends to ignore or denigrate this fact, but it is always emphasized when dealing with environmental hazards that might cause present-day mutations. Many years ago, the Environmental Mutagenic Society made a detailed study of this subject and concurred that mutations should *always* be avoided if possible.

Most mutations producing effects large enough to be observed are deleterious. . . . Furthermore, the wide variety of mechanisms by which radiations and chemicals induce mutations make it very unlikely that generalized schemes can be devised to protect against mutagens, except by avoiding them in the first place.²⁸

The exact nature of gene mutations is still somewhat obscure, since the exact nature of different genes is still somewhat controversial. Whatever it is, however, a mutation represents an unpredictable — evidently random — change in an extremely complex genetic programmed system. Since the program is inadvertently changed, it is essentially a *mistake* in the transmission of genetic information, as noted before.

²⁸ Environmental Mutagenic Society, "Environmental Mutagenic Hazards," *Science*, vol. 187 (February 14, 1975), p. 503.

Being an error process, mutation consists of all possible changes in the genetic material (excluding recombination and segregation).²⁹

The Society therefore recommended — as have practically all other scientists — that everything feasible be done to eliminate radiations and mutagenic chemicals from the environment.

Since the vast majority of detectable mutations are deleterious, an artificially increased human mutation rate would be expected to be harmful in proportion to the increase.³⁰

Evolutionists are always careful to say that only the “vast majority” of mutations are harmful, leaving open the possibility that some just might be beneficial. The possibilities are exceedingly limited, however.

From the standpoint of population genetics, positive Darwinian selection represents a process whereby advantageous mutants spread through the species. Considering their great importance in evolution, it is perhaps surprising that well-established cases are so scarce; for example, industrial melanisms in moths and increases of DDT resistance in insects are constantly being cited.³¹

As a matter of fact, however, neither of the cases cited is a true mutation. Industrial melanism in moths is simply a recombination of genetic factors already present, and the same is true of the insects.

Insect resistance to a pesticide was first reported in 1947 for the housefly (*Musca domestica*) with respect to DDT. Since then the resistance to pesticides has been reported in at least 225 species of insects and other arthropods. The genetic variants required for resistance to the most diverse kinds of pesticides were apparently present in every one of the populations exposed to these man-made compounds.³²

29 Ibid., p. 504.

30 Ibid., p. 512.

31 Motoo Kimura, “Population Genetics and Molecular Evolution,” *Johns Hopkins Medical Journal*, vol. 138 (June 1976), p. 260.

32 Ayala, “The Mechanisms of Evolution,” p. 63.

The mention of industrial melanism in moths refers to the famous peppered moth in England, often considered to be the classic example of “evolution in action” today. The story is found in practically every biology textbook, about how the light-colored moth evolved into a dark-colored moth with the advancing industrial revolution and the soot-darkening landscape. But most books do not give the updated version.

The peppered moth, *Biston betularia*, is a classic example of natural selection in action. As the dark satanic mills blackened the English landscape, the dominant form of the peppered moth changed from light to dark, a case of industrial melanism. Since the Clean Air Acts came into force, industrial pollution has declined. A new study by Sir Cyril Clarke and his associates shows that the light form of the peppered moth has become much more common.³³

This change, just like that of the insects responding to the pesticide, was not evolution at all, but conservation! The species has an inbuilt genetic potential to vary in color, with both light and dark moths always present in the population, enabling the population as a whole to shift its dominant coloration in response to environmental changes.

No mutations were involved at all, but simply recombinations of genetic inheritances at most, as involved regularly in all species. Mutational changes would take far longer to become fixed in a population than this shifting back and forth of genes already present.

The first black specimen of *Biston betularia* was caught in Manchester in 1848. By 1895, 98 per cent of the moths in the area were dark, an extremely rapid change given that the peppered moth breeds just once a year.³⁴

Because of all these problems, more and more evolutionists are realizing that ordinary mutations, as actually observed in nature, are *not at all adequate* to provide the basis for evolution. Neither will it do to suppose that very small, non-observable mutations, gradually accumulating over long periods of time, could do the job.

Bacteria, the study of which has formed a great part of the foundation of genetics and molecular biology, are the organ-

33 Jeremy Cherfas, “Clean Air Revives the Peppered Moth,” *New Scientist*, vol. 109 (January 2, 1986), p. 17., quoting Biological Journal of the Linnean Society, vol. 26, p. 189.

34 Ibid.

isms which, because of their huge numbers, produce the most mutants . . . bacteria, despite their great production of intra-specific varieties, exhibit a great fidelity to their species. The bacillus *Echerichia coli*, whose mutants have been studied very carefully, is the best example. The reader will agree that it is surprising, to say the least, to want to prove evolution and to discover its mechanisms and then to choose as a material for this study a being which practically stabilized a billion years ago.³⁵

The same is true of the organism whose mutants have probably been studied more than any other.

The fruit-fly (*Drosophila melanogaster*), the favorite pet insect of the geneticists, whose geographical, biotopical, urban, and rural genotypes are now known inside out, seems not to have changed since the remotest times.³⁶

The author of the above evaluations, Pierre Grassé, is not a creationist and, in fact, as France's leading zoologist, held the Chair of Evolution at the Sorbonne (France's leading university) for over 20 years. His opinion of mutations as an explanatory cause of evolution is summarized below:

The opportune appearance of mutations permitting animals and plants to meet their needs seems hard to believe. Yet the Darwinian theory is even more demanding: a single plant, a single animal would require thousands and thousands of lucky, appropriate events. Thus, miracles would become the rule: events with an infinitesimal probability could not fail to occur. . . . There is no law against day-dreaming, but science must not indulge in it.³⁷

This is surely an insightful evaluation, and Grassé's fellow-evolutionists would do well to pay attention to it. Mutations and natural selection must have been energized by a continuous succession of miracles if they really do constitute the explanation of evolution. It is small wonder that the new school of evolutionists is strenuously searching for a better explanation.

35 Pierre P. Grassé, *Evolution of Living Organisms* (New York: Academic Press, 1977), p. 87.

36 Ibid., p. 130.

37 Ibid., p. 103.

Yet, despite this knowledge, such an influential evolutionary spokesman as Stephen Jay Gould still considers the variations produced on such organisms as the fruit fly to be the first of the three best kinds of evidence for evolution.

Our confidence in the fact of evolution rests upon copious data that fall, roughly, into three great classes. First, we have the direct evidence of small-scale changes in controlled laboratory experiments of the past hundred years (on bacteria, on almost every measurable property of the fruit fly *Drosophila*), or observed in nature (color changes in moth wings, development of metal tolerance in plants growing near industrial waste heaps), or produced during a few thousand years of human breeding and agriculture.³⁸

These phenomena are nothing but normal variations, however, having nothing to do with real evolution. Biologists may like to call them “micro-evolution,” but Gould is out of character citing them as evidence for macro-evolution. He and his fellow punctuationists have persistently argued that micro-evolution is “de-coupled” from macro-evolution, the first never becomes the second!

In regard to the multitude of experiments that have been performed on the fruit-fly, the comments of Jeremy Rifkin, who is an anti-Darwinian evolutionist, are cogent:

The fruit fly has long been the favorite object of mutation experiments because of its fast gestation period (twelve days). X-rays have been used to increase the mutation rate in the fruit fly 15,000 percent. All in all, scientists have been able to “catalyze the fruit fly evolutionary process such that what has been seen to occur in *Drosophila* (fruit fly) is the equivalent of many millions of years of normal mutations and evolution.” Even with this tremendous speed-up of mutations, scientists have never been able to come up with anything other than another fruit fly.³⁹

These fruit-fly experiments, conducted now for many years in many labs all over the world, not only have never produced anything other than fruit flies, but have not even been able to generate a better fruit fly! All the

38 Stephen Jay Gould, “Darwinism Defined: The Difference between Fact and Theory,” *Discover* (January 1987), p. 65.

39 Jeremy Rifkin, *Algeny* (New York: Viking Press, 1983), p. 134.

mutant varieties so generated have been either lethal, harmful, or neutral in any presumed struggle for existence in nature.

Summarizing this type of present-day so-called “evolution in action,” some of the studies (e.g., peppered moth) are nothing but confirmation of the “conservation” implications of the creation model. Others (e.g., fruit flies) confirm the “deterioration” implications of the creation model. None of the studies relate in any degree whatever to true macro-evolution, which is the only point at issue between creationists and evolutionists. Instead they are all beautiful evidences in support of the basic stability of created organisms. These fruit flies have all either remained essentially the same as created in the beginning or else disintegrated and sometimes become extinct, in exact conformance with the definition of the creation model.

Imperfections as Evolution

The second of Gould’s three prime evidences for evolution has to do with the fossil record, which will be shown in the next chapter to be much better understood also in terms of the creation model. His third evidence can be considered here. It is the most bizarre of all; yet he considers it the most important of all:

Third, and most persuasive in its ubiquity, we have the signs of history preserved within every organism, every ecosystem, and every pattern of biogeographic distribution, by those persuasive quirks, oddities, and imperfections that record pathways of historical descent.⁴⁰

Gould’s reasoning here is that, if there were a Creator, He would have made everything “perfect,” so evidence of imperfections in plants and animals (not even to mention moral imperfections in human beings) indicates that they must have come about by evolution instead of creation.

Not many other evolutionists have picked up on this particular “evidence,” for obvious reasons. They have been accustomed to arguing ever since Darwin that the marvelous “adaptations” of organisms to their environments is a strong evidence of the effectiveness of natural selection. Gould, however, sounds almost like a creationist when he deals with this evidence (lest anyone misunderstand, however, he is decidedly *not* a creationist!).

The order of life and the persistence of nearly all basic anatomical designs throughout the entire geological history of

40 Gould, “Darwinism Defined,” p. 68.

multi-cellular animals record the intricacy and resistance to change of complex development programs, not the perfection of adaptive design in local environments.⁴¹

For a hundred years and more, the remarkable adaptations of organisms to their environment have been considered to be strong indicators of the efficiency of “natural selection.” The supposed selection of favorable variations, provided by random beneficial mutations is the essence of Darwinism, and especially of neo-Darwinism, and has long been accepted by most evolutionists as the basic mechanism through which new species evolve. In fact, the reason for Darwin’s success in the first place was that his theory seemed to provide a mechanism for explaining away the apparent evidences of design in nature. The remarkable relations of plants and animals to each other and to their environments has often been presented in ecstatic language as proof of the marvelous ability of natural selection. Actually, as already noted, many recent evolutionists have admitted that the very concept of natural selection as an agent of “evolution” is unscientific tautology. Those organisms that “survive” are *assumed* to have been the “fittest” by that fact.

Creationists, of course, have always argued that, while natural selection is a real process that serves to eliminate unfit organisms, it could never create the complex, wonderfully adapted organisms found in the living world. As noted above, Stephen Jay Gould has recently acknowledged that even William Paley, the great Christian advocate of design and “natural theology,” taught *this* type of natural selection more than half a century before Darwin.⁴² Creationists have argued persuasively that complex adaptations are evidence of creative design, not of chance variations, and Gould has even admitted this. The British scientist Jeremy Cherfas has recently echoed Gould’s thesis as follows:

In fact, as Darwin recognized, a perfect Creator could manufacture perfect adaptations. Everything would fit because everything was designed to fit.⁴³

This admission, however, does not mean at all that Gould or Cherfas or their fellow evolutionists have decided actually to believe in creative

41 Stephen J. Gould, “Through a Glass, Darkly,” *Natural History* (September 1989), p. 24.

42 Stephen Jay Gould, *Science* (April 23, 1982), p. 386.

43 Jeremy Cherfas, *New Scientist* (May 17, 1984), p. 29.

design. They have simply decided that adaptations do not prove evolution after all.

It is in the imperfect adaptations that natural selection is revealed, because it is those imperfections that show us that structure has a history. If there were no imperfections, there would be no evidence of history, and therefore nothing to favor evolution by natural selection over creation.⁴⁴

This is an amazing admission! The main evidence against creation and for evolution is that natural selection does not work! If there were no “imperfect” structures in nature, all the evidence would favor creation. No wonder evolution has to be imposed by authority and bombast, rather than by reason, if this is its only real evidence!

As a matter of fact, this argument from imperfections is merely a new wrinkle on the old discredited argument from vestigial organs. These are structures that were believed to have atrophied from once-useful structures to useless vestiges. S. R. Scadding, of the Zoology Department at Guelph University, comments on this argument thus:

Haeckel makes clear why this line of argument was of such importance to early evolutionary biologists. . . . It seemed difficult to explain functionless structures on the basis of special creation without imputing some lack of skill in design to the Creator.⁴⁵

Actually, there are probably no real vestigial organs, and probably no imperfect adaptations in nature. Scadding points out that the former list of nearly 100 such organs in humans has now dwindled to almost nothing.⁴⁶ The same could be shown for most of Gould’s alleged “imperfections.” But even if there really are any vestiges or imperfections, this would be evidence for degeneration, not for evolution.

It should be perfectly obvious that “imperfections” are an extraordinarily weak evidence for evolution. They are, instead, explicit confirmations of one of the two basic descriptors of the creation model — namely, that any “vertical” changes in the originally created organisms would be “downward” changes from their original forms.

Gould is right in inferring that an omnipotent, omniscient Creator would create perfect creations in the beginning. Each creature would be

44 Ibid.

45 S. R. Scadding, *Evolutionary Theory* (May 1981), p. 174.

46 Ibid, p. 175.

created with structures perfectly designed for its created environment. This does not mean, however, that there would never be later changes in either the environment or the organism or both. The creation model simply states that, *if* such changes occur, they will necessarily be in the direction of imperfection. One cannot improve perfection!

Thus, whatever “imperfections” may exist in present-day organisms, they are *not* evidence of evolution but of deterioration. Many such changes have even led to atrophy and extinction, but this is precisely the opposite of evolution!

The greater marvel is that so few imperfections do exist. The Creator’s conservation measures have enabled organisms to adapt to a wide variety of changing environments, and it is difficult to find any structure in any plant or animal that is not beautifully equipped to function at least adequately in fulfilling its purpose.

Neither adaptations nor imperfections speak of evolution, but, rather, of primeval creation followed by conservation supplemented occasionally by deterioration or extinction, exactly in accord with the creation model!

Chapter 3

Evolution Never Occurred in the Long Ago

Professor Pierre Grassé of the famous Sorbonne University in Paris, once recognized as Europe's leading zoologist, was convinced that evolution had stopped in the present age.

The evolution of all zoological groups was initially highly productive, then slowed down and is now restricted to the creation of new species.¹

Grassé was editor of the 28-volume encyclopedia *Traite de Zoologie*, and he taught the courses on evolution at the Sorbonne, yet he believed that evolution was limited today to ordinary variation and possibly speciation, exactly as we have shown in the preceding chapter. The great evolutionary advances had all occurred in the past, according to him, and could now be seen only in the fossils.

Naturalists must remember that the process of evolution is revealed only through fossil forms . . . only paleontology can provide them with the evidence of evolution and reveal its course or mechanisms.²

The fossil record has long been considered as the main evidence for evolution. As noted in the preceding chapter, Gould considered it to be one of the three arguments for proofs of evolution: the first being the

1 Pierre Grassé, *Evolution of Living Organisms* (New York: Academic Press, 1977), p. 82.

2 Ibid., p. 4.

small changes of the present (which Grassé thought were trivial), and the third the imperfections in organisms (an anomalous type of evidence, which seemed to occur mainly to Gould). With respect to the fossil record, Gould maintained this conclusion:

Second, we have direct evidence for large-scale changes, based upon sequences in the fossil record.³

In this chapter, therefore, we shall look in some depth at this supposedly definitive evidence of evolution.

Fossils: the Alleged Proof of Evolution

Obviously, the fossil record is the most important test of the two models, especially of evolution. Since vast spans of geologic time have been found necessary to allow evolutionary changes of significance, the question of what actually did happen in ancient eras is of primary importance.

The creation model, of course, must predict that the array of organisms preserved as fossils will correspond to the same classification system as applicable to present-day plants and animals. Since all the basic categories (species, genera, families, etc.) were created in the beginning, these categories must have persisted relatively unchanged ever since and into the present, with the exception of any that may have become extinct. Therefore, essentially the same kingdoms, phyla, classes, orders, etc., would apply to *fossil* classification, as apply to *modern* classification. The same sorts of “gaps” between different kinds of organisms in the present world would be anticipated in the fossils.

The creation model does not preclude extinction of types of plants or animals, any more than it precludes the death of individuals, but it does preclude the development of entirely new types from older types, either in the present or in the past. Therefore, it predicts that there will be no true transitional forms, from one type into another type, found in the fossil record. There may well be many variations within types, including transitions from one variety to another variety, and possibly from one species to another, but no true transitional intermediates from one basic type to another. It predicts that, whenever a new type of plant or animal first appears in the fossils, it will already be a fully typical representative of that type.

These are rather rigid constraints that we have placed on the creationist predictions, and they ought to give a clear indication as to its probable validity. No preliminary forms, no transitional forms, clear gaps

3 S. J. Gould, “Darwinism Defined,” *Discover*, vol. 8 (January 1987), p. 68.

between types, same taxonomic categories as at present, etc., — all of which are *explicitly different* from the predictions of evolution.

That is, if evolution is true, and if all organisms really have gradually developed from one or a few primeval, simple ancestral forms during the geologic ages, then the evidence for that development ought to be found in the fossil record of the past if it is found anywhere. There must have been many preliminary forms, and there must have been many transitional forms, and there should be at least a statistical sampling of these preserved in the fossils.

Though some gaps certainly are to be expected, because of the accidental nature both of fossilization and of fossil discoveries, such gaps should at least be randomly distributed between the present kinds of animals and the transitional forms. Gaps in the fossil record should not be the same kinds of gaps as those in the present taxonomic system, and there should be many true transitional intermediates found as fossils — if the evolution model has any value as a predictive system.

In fact, if evolution is true, even the basic taxonomic categories should have been evolving, and there should be evidence of these changes in the fossils.

That these predictions are the obvious and basic predictions of the evolution model can be appreciated if one stops to imagine what the reaction would be if real transitional forms were actually found! That is, if the fossil record really did yield an abundant sampling of true incipient and transitional forms, if actually there were changing taxonomies, if the fossil gaps were not regular and systematic but only statistical — all of this would be hailed as striking, indisputable proof of evolution. Such an array of evidence would, indeed, be hard for the creation model to refute.

Since, however, this type of evidence is *altogether lacking* in the fossil record, auxiliary conditions have to be imposed on the evolutionist predictions. Evolutionists may assume, for instance, that evolution took place explosively, in small populations, giving little opportunity for fossilization of the transitional forms. Additional assumptions must be introduced, then, to account for such evolutionary spurts, since the process today is apparently too slow to observe at all. The sudden appearance of all the basic taxonomic categories, or phyla, approximately a half-billion years or so ago in the Cambrian, with no fossil record of their prior development, is especially hard to incorporate into the evolution model.

No such auxiliary assumptions and conditions are needed for the creation model! All of its predictions are explicitly confirmed by the fossil record exactly as it stands. Even the general order of appearance of the

various fossils in the geologic strata is anticipated in the creationist framework, but this will be considered later.

It may be well at this point, however, to document (from evolutionary writers) the fact that there are no incipient or transitional forms in the fossils. Paul Moody, in a standard textbook used widely for many years, said:

So far as we can judge from the geologic record, large changes seem usually to have arisen suddenly . . . fossil forms, intermediate between large subdivisions of classification, such as orders and classes, are seldom found.⁴

As a matter of fact, they are *never* found!

That the dearth of intermediate forms extends even to smaller divisions was confirmed by Davis, in a very influential neo-Darwinian reference anthology:

The sudden emergence of major adaptive types as seen in the abrupt appearance in the fossil record of families and orders, continued to give trouble. A few paleontologists even today cling to the idea that these gaps will be closed by further collecting, but most regard the observed discontinuity as real and have sought an explanation.⁵

In his day, Darwin attributed these gaps to the limited number of fossils collected. This explanation is no longer adequate.

There is no need to apologize any longer for the poverty of the fossil record. In some ways it has become almost unmanageably rich and discovery is outpacing integration. . . . The fossil record nevertheless continues to be composed mainly of gaps.⁶

Finally, no less an authority than the leading neo-Darwinian paleontologist, George Gaylord Simpson, acknowledges the regular systematic existence of these gaps in the fossil record:

In spite of these examples, it remains true, as every paleontologist knows, that *most* new species, genera, and

⁴ Paul A. Moody, *Introduction to Evolution* (New York: Harper and Row, 1962), p. 503.

⁵ D. Dwight Davis, "Comparative Anatomy and the Evolution of Vertebrates," in *Genetics, Paleontology and Evolution*, ed. Jepsen, Mayr and Simpson (Princeton, NJ: Princeton University Press, 1949), p. 74.

⁶ T. N. George, "Fossils in Evolutionary Perspective," *Science Progress*, vol. 48 (January 1960), p. 1, 3.

families, and that nearly all categories above the level of families, appear in the record suddenly and are not led up to by known, gradual, completely continuous transitional sequences.⁷

Note that the same classification categories existed throughout the long ages of the fossil record as originally worked out for existing plants and animals. The system itself showed no signs of evolving. Furthermore, most of the major categories (down through at least the families) have remained clearly distinct since their first appearance in the record.

Now evolutionists may believe that the gaps still result from the rarity of fossil deposition and discovery. Or perhaps, as most think, the gaps result from spurts of explosive evolution caused by periods of intensified cosmic radiation or something else. The fact is, the gaps are still *there*, and this is a primary prediction of the *creation model*.

Never are fossils of creatures found with incipient eyes, with half-way wings, with half-scales turning into feathers, with partially evolved forelimbs, or with any other nascent or transitional characters. Yet there must have been innumerable individuals that possessed such features, *if* the neo-Darwinian model of evolutionary history is correct. It seems very strange that the fossilization process selected only those individuals for preservation that already had completed particular stages of evolutionary progress, and yet preserved these in great abundance and variety. Was Nature somehow ashamed of her evolutionary embryos?

The creation model predicts directly that the fossil record will be composed of the same classification categories as those of the present world, with the same kinds of gaps between the categories, and with no evidence of gradual transitions between these categories. This is exactly what is found. Creationists, therefore, believe that the fossil record, while not absolutely impossible of reconciliation with the evolution model, does conform much more simply and directly to the creation model.

It is noteworthy that the above quotations from Moody, Davis, George, and Simpson were all taken from publications during the reign of neo-Darwinism, before the advent of the modern school of punctuationism. It was almost universally taught during those years that evolution proceeded slowly and gradually, produced by the accumulation of the small, rare, beneficial mutations that had been preserved by natural selection.

⁷ George Gaylord Simpson, *The Major Features of Evolution* (New York: Columbia University Press, 1953), p. 360. Emphasis his.

Even though mutations always seemed to be either harmful or neutral, it was believed that there must be some good ones, and that these could be preserved and accumulated by natural selection through a sort of ratchet mechanism that would allow the bad ones to be discarded. This, of course, was wishful thinking of a high order, but the philosophy was that, in a billion years, anything could happen.

Even then, however, it was recognized that there were practically no true transitional forms among the fossils, as indicated by the above quotations. Nevertheless, since it was obvious that no real evolution of consequence could be observed taking place today, it was necessary to use the fossils as evidence that it had occurred in the past. A widely used textbook on evolution has emphasized this fact:

While many inferences about evolution are derived from living organisms, we must look to the fossil record for the ultimate documentation of large-scale change. In the absence of a fossil record, the credibility of evolutionists would be severely weakened. We might wonder whether the doctrine of evolution would qualify as anything more than an outrageous hypothesis.⁸

These so-called “circumstantial” evidences will be reviewed later, but it is obvious that the fossil record is the definitive evidence for evolution, such as it is.

And just what is that evidence? Its formal expression is summarized in a tabulation known as the “geologic column,” which purports to represent the types of plants and animals living in the various geological ages of the past billion years or so. This standard column may be found in many textbooks of general geology, historical geology or evolution, and in many textbooks of biology or general science, so it is assumed that the reader is at least somewhat familiar with the concept.

The “column” supposedly represents an idealized cross-section through the earth’s sedimentary crust, from the surface down to the crystalline “basement” rocks. These sedimentary rocks (sandstones, shales, conglomerates, limestones, etc.) have been deposited by processes of sedimentation (erosion from some source, then transportation — usually by water, though sometimes by ice or wind — and finally by deposition and lithification). Such rocks often contain “fossils” (bones, shells, footprints, etc.) of the plants or animals that were living at the time of rock formation. Presumably, the earliest ages with their fossils are preserved at

⁸ Steven M. Stanley, *Macroevolution: Pattern and Process* (San Francisco, CA: W. H. Freeman, 1979), p. 2.

the bottom of the column, proceeding up through later ages, to the most recent ages and their fossils on the top.

When one looks uncritically at this standard representation of the geologic column — or geological-time table, as it is also called — it does, indeed, give a superficial appearance of evolution over the geological ages. With only one-celled organisms at the bottom, then marine invertebrates, then fishes, amphibians, reptiles, birds, mammals, and finally man at the top, it *seems* to be telling the story of evolution during past ages, even though we do not see it taking place today.

But this appearance is strictly superficial. When one begins to look more closely at the fossil record, the evidence for evolution — and even for the geological ages themselves — soon vanishes. For the present discussion, however, we shall assume that the various divisions and sequences in the geological column are real, and we shall look only at the fossils themselves. We can sidestep the question of time by employing the alternate names for the divisions — that is, using “system” instead of “period,” and “series” instead of “epoch.” These are legitimate alternate terms, used quite regularly by working geologists, stressing the actual physical nature of the rocks, rather than the imaginary “ages” assigned to them.

A great abundance of fossils exist, surely enough to show evidence of evolutionary transitions if they ever really happened. Billions and billions of fossils have been preserved, often in great fossil “graveyards,” found all over the world, from every so-called age. Many of these represent animals that are now extinct, but probably most are merely fossilized varieties or closely related species or genera of animals and plants that are still living today. If any transitional or intermediate types ever existed, they should — like all the others — be found in reasonable statistical abundance among this profusion of remains.

They are not, however! The predictions from the creation model (see page 18) are precisely verified by the actual fossil record. Consider just a few typical statements from knowledgeable evolutionists:

The oldest truth of paleontology proclaimed that the vast majority of species appear fully formed in the fossil record and do not change substantially during the long period of their later existence. . . . In other words, geologically abrupt appearance followed by subsequent stability.⁹

9 Stephen Jay Gould, “Opus 200,” *Natural History*, vol. 100 (August 1991), p. 14.

Since 1859 one of the most vexing properties of the fossil record has been its obvious imperfection. . . . The inability of the fossil record to produce the “missing links” has been taken as solid evidence for disbelieving the theory.¹⁰

All paleontologists know that the fossil record contains precious little in the way of intermediate forms; transitions between major groups are characteristically abrupt.¹¹

The point emerges that, if we examine the fossil record in detail, whether at the level of orders or of species, we find — over and over again — not gradual evolution, but the sudden explosion of one group at the expense of another.¹²

This last reference is from the presidential address at the 1976 meeting of the British Geological Association. In that same address, the eminent geologist Dr. Ager made the following pungent comment:

It must be significant that nearly all the evolutionary stories I learned as a student . . . have now been debunked.¹³

It would be easily possible to multiply statements like these about the ubiquitous absence of transitional forms in the fossil record, statements made by evolutionists themselves, but those above clearly make the point. The point is that, out of the many billions of fossils known to be preserved in the sedimentary rocks of the earth’s crust, including representatives of many still-living types of plants and animals, *no true transitional fossil forms* have yet been discovered!

This is a very perplexing situation, if any such transitional forms ever existed at all. It is certainly not the situation that a doctrinaire evolutionist would have predicted ahead of time. In fact, Charles Darwin himself was troubled by the lack of transitional forms. In his day, he could attribute this dearth simply to the limited number of fossils known at that time (the first dinosaur fossil had only recently been discovered). He actually predicted that the missing transitional forms would be discovered through further fossil exploration. But, of course, they have not been found, and

10 A. J. Boucot, *Evolution and Extinction Rate Controls* (Amsterdam: Elsevier Scientific Publishing Co., 1975), p. 196.

11 Stephen Jay Gould, “The Return of Hopeful Monsters,” *Natural History*, vol. 86 (June/July 1977), p. 24.

12 Derek W. Ager, “The Nature of the Fossil Record,” *Proceedings of the British Geological Association*, vol. 87, no. 2 (1976), p. 133.

13 *Ibid.*, p. 132.

creationists predict that they never will be found, because they never existed!

Now all of this precisely discredits the evolution model and precisely supports the creation model. The fossil record has been touted as the main evidence for evolution, but, instead, it denies evolution. No wonder, therefore, that in a recent review article by a professor of zoology at the famed Oxford University — and an explicitly anti-creationist article at that — we are told that the fossil record is irrelevant to the issue!

In any case, no real evolutionist, whether gradualist or punctuationist, uses the fossil record as evidence in favor of the theory of evolution as opposed to special creation.¹⁴

Isn't that interesting! We noted earlier that Pierre Grassé concluded that "the process of evolution is revealed only through fossil forms."¹⁵ Yet Ridley says that no evolutionist should use the fossils to prove evolution. Two top-flight European zoologists at the two most prestigious universities in Europe are in diametric disagreement on such a definitive evolutionary argument as this. Grassé says that only the fossils can provide evidence of evolution; Ridley says that the fossils do not provide evidence of evolution. So which is right?

They are both right. Grassé is correct in saying that, since evolution does not occur today, the fossils must be used to show whether it occurred in the past. Ridley is also correct when he says that the fossils don't show any such evidence. There is, therefore, no evidence anywhere that evolution has ever occurred at all, either in the present or in the past.

The needed intermediate forms are still missing after 200 years of intensive fossil collecting. The paleontologist says that we cannot find them because evolution occurred in spurts, so rapidly that only a few intermediates ever existed. The modern geneticist, however, says that evolution proceeds so slowly and gradually that we cannot actually observe it taking place. We can't see evolution in the present because it goes too slow; we can't see it in the past because it went too fast. We can't *observe* it anywhere! Therefore, as "true scientists," we must "walk by faith, not by sight." Otherwise, we would become creationists! So they seem to be saying.

14 Mark Ridley, "Who Doubts Evolution?" *New Scientist*, vol. 90 (June 25, 1981), p. 831.

15 Grassé, *Evolution of Living Organisms*, p. 4.

Where Are the Evolutionary Transitions?

Many evolutionists will object vigorously to the foregoing analysis. We often hear one say: “That’s absurd! There are *many* evolutionary intermediate forms in the fossils.” Well, where? Let us explore, one by one, the supposed evolutionary advances in progressing from amoeba to man, in search of transitional forms.

We begin with the one-celled organisms in the Proterozoic rocks at the bottom of the geological column, ignoring the question for the moment of where *they* came from. It is true that numerous types of fossil bacteria and protozoan animals have been documented in these supposedly very ancient rocks. It is also true that many of these simple organisms still exist today, not having changed noticeably in the billion or so years since they are presumed to have first appeared. We have already mentioned the notorious *E. coli* bacteria, which are still (uncomfortably) very much with us after all that time. There are others.

Many of the prokaryotes from Spitzbergen and related areas exhibit characteristics of morphology, development and behavior (as inferred from their orientation in the sediments) that render them virtually indistinguishable from cyanobacteria and other bacteria that live in the comparable habitats today. . . . Some Spitzbergen eukaryotes resemble modern prasinophyte (green) algae, whereas others bear closer resemblance to the so-called chromophyte algae such as the dinoflagellates that are ubiquitous in modern oceans.¹⁶

It does seem odd that these and other “billion-year” old organisms, which tend to multiply quite rapidly, would remain so unaffected by evolutionary pressures for so long, if evolution is true. Presumably, however, at least one did change, because the rocks of the Cambrian “period” (or system) team with multitudes of marine invertebrate animals of great complexity and fantastic variety — worms, brachiopods, starfish, jellyfish, trilobites, and a host of others. These may well be the most abundant of all the fossils.

Yet, out of the billions of fossils of Precambrian protozoa and billions of Cambrian metazoan fossils, *nowhere* has there *ever* been found a transitional form from a Precambrian one-celled animal to a Cambrian many-celled invertebrate.

¹⁶ Andrew H. Knoll, “End of the Proterozoic Eon,” *Scientific American*, vol. 265 (October 1991), p. 64–65.

If any event in life's history resembles man's creation myths, it is this sudden diversification of marine life when multi-cellular organisms took over as the dominant actors in ecology and evolution. Baffling (and embarrassing) to Darwin, this event still dazzles us and stands as a major biological revolution on a par with the invention of self-replication and the origin of the eukaryotic cell. The animal phyla emerged out of the Precambrian mists with most of the attributes of their modern descendants.¹⁷

As we shall see in a later chapter, the “invention of self-replication and the eukaryotic cell” — that is, the origin of life — is indeed a complete mystery, in fact, explicable only by what amounts to a miracle of creation! And evidently the transition from one-celled organisms to the great variety of many-celled invertebrates would also require something like a miracle. In any case, there are no transitional forms to show that this tremendous evolutionary jump ever took place. Stephen Gould has the following comment:

Studies that began in the early 1950s and continue at an accelerating pace today have revealed an extensive Precambrian fossil record, but the problem of the Cambrian explosion has not receded, since our more extensive labor has still failed to identify any creature that might serve as a plausible immediate ancestor for the Cambrian fauna. . . . Where, then, are all the Precambrian ancestors — or, if they didn't exist in recognizable form, how did complexity get off to such a fast start?¹⁸

Try creation, Dr. Gould! His mention of an “extensive Precambrian fossil record” is a reference to the so-called “Ediacaran fauna,” a complex of strange metazoan fossils that are radically different from any of the Cambrian invertebrates. These unique creatures likewise have no transitional connection with any of the Precambrian protozoa. As Gould says,

17 Stefan Bengtson, “The Solution to a Jigsaw Puzzle,” *Nature*, vol. 345 (June 28, 1990), p. 765. Richard Dawkins has a revealing comment in his *Blind Watchmaker* (New York: Norton, 1986), “Both schools of thought agree that the only alternative explanation of the sudden appearance of so many complex animal types in the Cambrian era is divine creation, and both would reject this alternative” (p. 230). That is, both gradualists and punctuationists believe that this vast gap is due to the incomplete fossil record, rather than to creation.

18 Stephen Jay Gould, “A Short Way to Big Ends,” *Natural History*, vol. 95 (January 1986), p. 18.

neither is there any transitional form connecting *any* of the Ediacaran fossils with *any* of the Cambrian invertebrates.

The only defense that evolutionists have tried to offer for the absence of any transition to the Cambrian animals is that the latter were the first ones with “hard parts” to be preserved. That, however, is a poor excuse. None of the Precambrian fossils had hard parts. Furthermore, many of the larger Cambrian fossils did not have hard parts (e.g., jellyfish), yet their fossils are available in considerable numbers.

The same is true of animals in later ages, too. For example, note the following recent discussion:

In certain circumstances the organic tissues themselves can survive for geologically significant periods of time.¹⁹

Mineralized skeletons are not ubiquitous in the animal kingdom. Two-thirds of existing phyla lack any mineralized hard parts.²⁰

The discovery in Waukesha, Wisconsin, of the first significant assemblage of soft-bodied animals from the Silurian period, 400 million years ago, extends the known time range of some taxa back several millions of years.²¹

Surely, if there were any ancestors of the Cambrian invertebrates in the Proterozoic (Precambrian) sediments, some of them would have soft parts in the process of evolving into hard parts, because they had acquired hard parts by the Cambrian “period.” But even if they didn’t, surely some of these soft-bodied “ancestors” could have been preserved somewhere. If so, they have not been found as yet.

Furthermore, since two-thirds of the existing phyla do not have hard parts capable of mineralization, as Briggs says, this means that many more modern animals that have not yet been found in the fossil record probably were there all the time, but just did not leave any record.

Finally, note this summary statement by Briggs, who is a leading British paleontologist, about the abundance of fossils whose soft parts have been preserved in the Cambrian rocks:

From the beginning of the Cambrian the number of known sites displaying significant soft-part preservation ex-

19 Derek E. G. Briggs, “Extraordinary Fossils,” *American Scientist*, vol. 79 (March/April 1991), p. 135.

20 Ibid., p. 136.

21 Ibid., p. 137.

ceeds 60, and for each of these major sites there are many minor ones.²²

It is also very significant, as mentioned before, that the taxonomic categories themselves have not evolved since the beginning. The same classification system developed by Linnaeus and others to categorize modern plants and animals applies also to the plants and animals of the Cambrian and Precambrian periods, except that a number of the Cambrian phyla have become extinct (note that extinction is not evolution!). Once the great explosion of Cambrian phyla took place, no new phyla ever evolved after that.

Described recently as “the most important evolutionary event during the entire history of the Metazoa,” the Cambrian explosion established virtually all the major animal body forms — *Baupläne* or phyla — that would exist thereafter, including many that were quickly “weeded out” and became extinct. Compared with the 30 or so extant, some people estimate that the Cambrian explosion may have generated 100. The evolution innovation of the Precambrian/Cambrian boundary had clearly been extremely broad.²³

This “explosion” has no real evolutionary explanation. As far as all appearances go, these 30 (or 100) phyla seem to have been created fully developed to begin with.

If ever we were to expect to find ancestors to or intermediates between higher taxa, it would be in the rocks of late Precambrian to Ordovician times, when the bulk of the world’s higher animal taxa evolved. Yet transitional alliances are unknown or unconfirmed for any of the phyla or classes appearing then.²⁴

The Chordates and the Vertebrates

Not long ago, it was believed that the earliest vertebrates evolved in the Silurian period. Now, however, it is generally agreed that the

22 Ibid., p. 139.

23 Roger Lewin, “A Lopsided Look at Evolution,” *Science*, vol. 241 (July 15, 1988), p. 291.

24 James W. Valentine and Douglas H. Erwin, “Interpreting Great Developmental Experiments: The Fossil Record,” in *Development as an Evolutionary Process* (Alan R. Lias, Inc., 1987), p. 84.

vertebrate phylum (or sub-phylum, if preferred), like all the other phyla, was present in the Cambrian itself.

Discoveries of fragmentary phosphatic plates, interpreted as pertaining to heterostracans, from numerous localities in Late Cambrian and early Ordovician marine limestone extend the vertebrate record back to more than 500 million years before the present. . . . Fossil evidence of pre-vertebrate chordate evolution is still scanty and equivocal.²⁵

The presence of cellular bone in the Late Cambrian-earliest Ordovician genus *Cordylodus* predates the earliest previously recorded occurrence of vertebrate hard tissues by around 40 million years.²⁶

The addition of the conodonts increases the number of well-established Cambro-Ordovician vertebrate genera by a factor of 30, from 5 to nearly 150.²⁷

The origin of true fishes, of course, is still a mystery to evolutionists. Exactly which marine invertebrate “evolved” into a fish is completely unknown, because no intermediate forms have ever been found. This is surely strange, because the transition from an animal with hard parts on the outside (e.g., shells) to one with hard parts on the inside (e.g., bony skeleton) must have been a very long and difficult transition; therefore, surely some of these transitional animals must have been buried and fossilized somewhere! Multiplied billions of both invertebrate fossils and fish fossils have been preserved, but apparently no intermediate forms. How does the evolution model accommodate this anomaly?

It doesn't, of course, but it perfectly fits the creation model. The evolution model should be rejected on this basis alone.

How this earliest chordate stock evolved, what stages it went through to eventually give rise to truly fish-like creatures

25 James A. Hopson and Leonard B. Radinsky, “Vertebrate Paleontology: New Approaches and New Insights,” *Paleobiology*, vol. 6 (Summer 1980), p. 256. See also “A Fish from the Upper Cambrian of North America,” by J. Rapetski (*Science*, vol. 200, 1978), p. 529.

26 I. J. Sansom et al., “Presence of the Earliest Vertebrate Hard Tissues in Conodonts,” *Science*, vol. 256 (May 29, 1992), p. 1310.

27 D. E. Briggs, “Conodonts: A Major Extinct Group Added to the Vertebrates,” *Science*, vol. 256 (May 29, 1992), p. 1286.

we do not know . . . there is a gap of perhaps 100 million years we will probably never be able to fill.²⁸

But whatever ideas authorities may have on the subject, the lung fishes, like every other major group of fishes that I know, have their origins firmly based in *nothing*.²⁹

All three subdivisions of the bony fishes appear in the fossil record at approximately the same time. . . . How did they originate? What allowed them to diverge so widely? . . . And why is there no trace of earlier, intermediate forms?³⁰

The answer to all such questions, obviously, is that of direct creation, but evolutionists automatically reject this possibility. As we proceed up the theoretical geological “column,” we find the same types of gaps between the various classes of vertebrates, as the gaps between the various phyla. That is, there are no transitional forms between the fish and the amphibians, between amphibians and reptiles, between reptiles, and the mammals and birds. These gaps apply between all the classes just as they do between all the phyla.

Students of evolutionary history have observed repeatedly that in an adaptive radiation, the major subgroups appear early and at about the same time. . . . Nearly all living phyla of marine invertebrates that have reasonably good fossil records have first occurrences either in the late Precambrian or early to middle Cambrian. At the class level there are 27 paleontologically important living groups and all have documented occurrences which are Silurian or older. . . . The same relative pattern can be seen in the geologic records of vertebrates and land plants, although origins are generally displaced in time toward the recent.³¹

In other words, practically all classes, as well as all phyla, have existed unchanged since their earliest appearance far back in “geological time.”

28 F. D. Ommanney, *The Fishes* (Life Nature Library, 1964), p. 60.

29 Errol White, “A Little on Lungfishes,” *Proceedings of the Linnaean Society of London*, vol. 177 (January 1966), p. 8.

30 Gerald T. Todd, “Evolution of the Lung and the Origin of Bony Fishes: A Causal Relationship,” *American Zoologist*, vol. 26, no. 4 (1980), p. 757.

31 David M. Raup, “On the Early Origin of Major Biologic Groups,” *Paleobiology*, vol. 9, no. 2 (1983), p. 107.

Furthermore, the “time” of first appearance is continually being pushed back further with new fossil discoveries.

Experience has shown that as more fossils are discovered, the first occurrences of major groups tend to be pushed back in time.³²

To be more specific, the first amphibians are already recognizable as true amphibians.

No clearly intermediate form in the fish-tetrapod transition has been discovered.³³

The same applies to the transition from amphibians to reptiles.

Unfortunately not a single specimen of an appropriate reptilian ancestor is known prior to the appearance of true reptiles. The absence of such ancestral forms leaves many problems of the amphibian-reptile transition unanswered.³⁴

Furthermore, each of the orders among the amphibians is completely different from the others, with no intermediates, and the same is true of the reptilian orders and the orders of fishes. This fact could be documented at length, but that seems unnecessary, since no vertebrate paleontologist would dispute it. The same is true of the classes and orders among the invertebrates. Wherever we look in the fossil record, the transitional forms so essential to evolutionary theory are missing. These facts, on the other hand, fit the creation model perfectly!

Alleged Transitional Forms

The same absence of transitional forms is found between classes of the “higher” vertebrates — that is, between reptiles and mammals, and between reptiles and birds — although both birds and mammals are believed by evolutionists to have evolved from reptiles.

However, it is at this point that evolutionists commonly interject their classic examples of alleged transitional forms, namely the mammal-like reptiles and the reptile-like birds, especially *Archaeopteryx*. Whenever a creationist asks an evolutionist for examples of fossil transitions, it is almost inevitable that these two (in addition to the

³² Ibid., p. 113.

³³ Hopson and Radinsky, “Vertebrate Paleontology,” p. 258.

³⁴ Lewis L. Carroll, “Problems of the Origin of Reptiles,” *Biological Reviews of the Cambridge Philosophical Society*, vol. 44 (1969), p. 393.

supposed ape-men, a topic that will be discussed later) are the ones that will be cited.

Now if evolution were really true, there should be multitudes of transitional forms available to document it. In fact, one might properly suppose (if it were not for his awareness of the real world) that *every* living organism would be in some kind of transition. So why is it that evolutionists can suggest only two or three possible (but exceedingly doubtful) transitional forms? To creationists, the answer is obvious. Evolution is false!

Terrestrial vertebrates (reptiles, mammals, birds) are easy enough to distinguish when they are living, but since they all have somewhat similar functions, their basic skeletal structures would naturally be created to be somewhat similar.

Consider the “transition” between reptiles and mammals:

Recent mammals and reptiles are easily distinguished by the differences of anatomical, physiological, reproductive and adaptive features, but in the reptile-mammal transition documented by the late Triassic fossils, the distinction is not clear-cut. . . . The presence of a squamosal-dentary articulation forming part or all of the joining between the skull and lower jaw is now used as the main practical diagnostic criterion for the class mammalia. . . . This distinction in the jaw articulation was found to be inadequate, however.³⁵

All the mammal-like reptiles are extinct, though they were numerous and quite varied in the past, so it is not possible to examine and evaluate their characteristic soft biology. It is the latter by which living mammals and reptiles are distinguished today, not by the bones in the ear-jaw system.

There is no reason whatever to assume that the mammal-like reptiles were animals in the process of being transformed from reptiles to mammals. They originated simultaneously with the other orders of reptiles, with no clear indication of ancestry.

Each species of mammal-like reptile that has been found appears suddenly in the fossil record and is not preceded by the species that is directly ancestral to it. It disappears some

35 Sankar Chatterjee, “An Ictidosaur Fossil from North America,” *Science*, vol. 220 (June 10, 1983), p. 1151.

time later, equally abruptly, without leaving a directly descended species.³⁶

Not only was their origin without any indication of reptilian ancestry, but also their extinction was without any mammalian descendants, at least so far as the evidence goes.

The transition to the first mammal, which probably happened in just one or, at most, two lineages, is still an enigma.³⁷

Those searching for specific information useful in constructing phylogenies of mammalian taxa will be disappointed.³⁸

The various orders of mammal-like reptiles (pelycosaur, therapsids, theriodonts, cynodonts, etc.) were apparently quite successful in their respective environments. There is no reason at all not to conclude that they had been *created* for those environments. Some were the size of a rat, some as large as a rhinoceros, with hundreds of different species. Other reptilian orders, of course, have survived, while all the mammal-like reptiles became extinct even earlier than the dinosaurs, for reasons unknown.

If therapsids were so diverse and so successful, what became of them? As in the case of more recent extinctions, the answer is not fully known.³⁹

In fact, Tom Kemp, curator of zoology at the Oxford University Museum, and one of the top authorities on the mammal-like reptiles, has concluded that each type was destroyed by a separate sudden mass extinction, followed by a very sudden evolution of a new type. The reviewer of Kemp's definitive book on these creatures notes this aspect in particular:

Major evolutionary change was restricted to the short interval between the mass extinction and completion of the

36 Tom Kemp, "The Reptiles that Became Mammals," *New Scientist*, vol. 93 (March 4, 1982), p. 583.

37 Roger Lewin, "Bones of Mammals' Ancestors Fleshed Out," *Science*, vol. 212 (June 26, 1981), p. 1492.

38 R. Eric Lombard, Review of *Evolutionary Principles of the Mammalian Middle Ear*, by Tom S. Kemp (Berlin: Springer-Verlag, 1978), in *Evolution*, vol. 33 (no. 4), p. 1230.

39 "Adding Flesh to Bare Therapsid Bones," *Science News*, vol. 119 (June 20, 1981), p. 389.

sudden radiation. . . . The rapid rates of morphologic change accompanying the subsequent radiations are attributed to mutations of “regulator genes” — in effect, the production of “hopeful monsters” — with natural selection playing only a minor role in the process.⁴⁰

This concept of mass extinction and sudden appearance of seemingly parent-less new orders might give support (as Kemp suggests) to the punctuated equilibrium school of Gould and Eldredge. A still better explanation, however, is special creation of each type, fully functional in all its parts and already adapted to its intended purpose by its Creator.

The even more well-known evolutionary scenario of *Archaeopteryx* as a reptile-bird transition form has a similar creationist explanation. This “primitive” bird is almost always the first example cited when one asks an evolutionist for an example of an evolutionary transition.

Archaeopteryx was a relatively small bird, supposedly representing a lizard-type reptile in the process of evolving into a bird. It had teeth and claws like a reptile, but wings with feathers like a bird. Probably no more than seven fossils of this creature have been found, only three of which show the feather impressions and essentially the complete animal. The first two to be found were offered by a Bavarian doctor as evidence of evolution soon after the publication of Darwin’s *Origin of Species*. He had obtained them apparently from a fossil-rich limestone bed in Germany.

In 1985, the British astronomer Fred Hoyle and an Israeli scientist, Lee Spetner, made studies on these two specimens, which resulted in allegations that the fossils were fraudulent, with chicken feathers pressed into a cement matrix that was then applied to two genuine fossils of a small dinosaur. Hoyle and Spetner, along with Hoyle’s colleague N. Wickramasinghe, then published papers⁴¹ and a small book showing their evidence of the fraud.

Hoyle and Spetner presented what seemed like a strong case for the fabrication of the “Piltdown Bird,” as many started calling it, in reference to the famous Piltdown Man hoax of previous fame. As might be expected, however, this charge against such a key “proof” of evolution could not be allowed to stand, and evolutionists everywhere were

40 James A. Hopson, “Synapsids and Evolution,” Review of *Mammal-like Reptiles and the Origin of Mammals* (New York: Academic Press, 1982, 364 p.), in *Science*, vol. 219 (January 7, 1983), p. 50.

41 Fred Hoyle and N. Wickramasinghe, “*Archaeopteryx*, the Primordial Bird?” *Nature*, vol. 324 (December 18/25, 1986), p. 622. See also Gail Vines, “Strange Case of *Archaeopteryx* ‘Fraud,’” *New Scientist*, vol. 105 (March 14, 1985), p. 3.

indignant. A number of papers purportedly refuting the fraud allegation were published, and the furor has died down now, with *Archaeopteryx* still offered in proof of evolution by most evolutionists. Unfortunately, these fossils now have been locked away in the basement of the British Museum of Natural History, no longer accessible to public view or further research.

Assuming that it is a genuine fossil of a real animal, there is still no good evidence that it is a transitional form. It was a true bird, not a half-reptile. It had feathered wings, and that is what makes a bird. In fact, just before the alleged fraud exposure, an international conference on *Archaeopteryx* was assembled in Germany to evaluate its status.

At the end of the three days of presentations, Charig orchestrated a concerted effort to summarize the ideas for which consensus exists. The general credo runs as follows: *Archaeopteryx* was a bird that could fly, but it was not necessarily the direct ancestor of modern birds. . . . A communiqué expressing the unanimous belief of all participants in the evolutionary origin and significance of *Archaeopteryx* was adopted, in order to forestall possible misuse by creationists of apparent discord among scientists.⁴²

If nothing else, this conference points up the desperate need felt by evolutionists for a proof of evolution.

And yet, they unanimously acknowledged that *Archaeopteryx* was a bird, though probably not the ancestor of modern birds. That particular link is still missing.

The ornithologist Alan Feduccia has made many studies and written several articles on *Archaeopteryx*. He has shown that it had aerodynamically efficient feathers, just as much so as modern birds. The “claws” — which some cite as evidence of reptilian kinship — actually show that its habitat was arboreal, like that of other birds. Note his conclusion:

Archaeopteryx probably cannot tell us much about the early origins of feathers and flight in true protobirds, because *Archaeopteryx* was, in the modern sense, a bird.⁴³

42 Peter Dodson, “International *Archaeopteryx* Conference,” *Journal of Vertebrate Paleontology*, vol. 5 (June 1985), p. 179.

43 Alan Feduccia, “Evidence from Claw Geometry Indicating Arboreal Habits of *Archaeopteryx*,” *Science*, vol. 259 (February 5, 1993), p. 792.

Incidentally, the claws of this animal have no relation to those of reptiles. A number of modern birds also have wing claws. One of these is the hoatzin, which also has a strange “kinship” with cows and sheep, employing foregut fermentation in its digestive system like any big ruminating mammal. With respect to the claws, a short review article notes:

[Stuart D. Strahl, of the New York Zoological Society’s Wildlife Conservation International] adds that some ornithologists call the “hoatzin” primitive because of its archaeopteryx-like claws; but he prefers to think of it as “highly specialized.” Sivans, ibis, and many other birds, he notes, have wing claws; they just never make use of them.⁴⁴

As far as the teeth of *Archaeopteryx* are concerned, modern birds do not have teeth, but that is not to say that the Creator could not have made some birds with teeth (not all reptiles have teeth, incidentally, so teeth are not *necessarily* a reptilian characteristic). There are other extinct toothed birds, and the teeth of *Archaeopteryx* were like those of other toothed birds — not at all like those of reptiles. One example, recently discovered in China, not only had teeth and claws, but it is “younger” than *Archaeopteryx*.

The recent discovery of an articulated fossil bird about 20 to 15 m. y. younger than *Archaeopteryx*, has opened a new window on early Avian evolution. . . . The Chinese bird was arboreal . . . Other characters establish the fossil avian as the second most primitive bird next to *Archaeopteryx*, such as the presence of toothed jaws.⁴⁵

A very recent bird find in Mongolia had hands and arms like those of digging animals, as well as teeth, and is dated as only half as old as *Archaeopteryx*.

Mongolian and U.S. researchers have found a 75-million-year-old, bird-like creature with a hand so strange it has left paleontologists grasping for an explanation. . . . Paul Sereno of the University of Chicago notes that *Mononychus* had arms built much like those of digging animals. Because moles and other diggers have keeled sternums and wrists

44 J. H., “What’s a Hoatzin?” *Scientific American*, vol. 261 (December 1989), p. 30.

45 Paul C. Sereno, “Ruling Reptiles and Wandering Continents: A Global Look at Dinosaur Evolution,” *GSA Today*, vol. 1 (July 1991), p. 144.

reminiscent of birds, the classification of *Mononychus* becomes difficult, he says.⁴⁶

Possibly, birds evolved from moles instead of from reptiles!

Actually, *Archaeopteryx*, *Mononychus*, and every other type of bird, reptile, mammal, and whatever, give every indication of being special creations of the God of creation, each with its own distinctive structure designed for its own specific purpose in the creation. With respect to the classic “transitional form,” *Archaeopteryx*, even such doctrinaire evolutionists as Eldredge and Gould recognize that it is not really transitional.

At the higher level of evolutionary transition between basic morphologic designs, gradualism has always been in trouble. . . . Smooth intermediates between *Baupläne* are almost impossible to construct, even in thought experiments. There is certainly no evidence for them in the fossil record (curious mosaics like *Archaeopteryx* do not count).⁴⁷

Archaeopteryx is a “mosaic” of useful and functioning structures found also in other creatures, not a “transition” between them. A true transitional structure would be, say, a “sceather” — that is, a half-scale, half-feather — or a “ling” — half-leg, half-wing — or, perhaps a half-evolved heart or liver or eye. Such transitional structures, however, would not survive in any struggle for existence. No wonder these authors say that one could not conceive of such a thing even in a “thought experiment.”

The same applies to the mammal-like reptiles and other transitional forms that have occasionally been suggested, such as the coelacanth fish and the lungfish, both of which are occasionally proffered as about to become amphibians, as well as the ichthyostegids (the fish-like amphibians) and the seymourians (amphibian-like reptiles). All such creatures are really “mosaics,” not “transitions.”

A wondrous example of a modern mosaic creature is the famous duck-billed platypus. It has fur, and it suckles its young like a mammal, lays eggs, and possesses a duck-bill like a bird, spends most of its time in water like an amphibian, has a poison sac like a reptile, and can pick up electric signals like nothing else.

46 Monastersky, R., “A Clawed Wonder Unearthed in Mongolia,” *Science News*, vol. 143 (April 17, 1993), p. 245.

47 Stephen Jay Gould and Niles Eldredge, “Punctuated Equilibria: the Tempo and Mode of Evolution Reconsidered,” *Paleobiology*, vol. 3 (Spring 1977), p. 147.

To be a platypus sports an unbeatable combination for strangeness . . . its obvious melange of reptilian (or birdlike), with obvious mammalian, characters . . . a superbly well-designed creature for a particular, and unusual, mode of life. . . . The platypus is one honey of an adaptation.⁴⁸

The platypus is certainly not a transitional form, nor some kind of hybrid. Neither are there any fossil transitional forms in the process of becoming a platypus. As Gould says (perhaps without thinking, since he does not believe in design — only in chance), it is “superbly well designed” for its “unusual mode of life.” It is hard for evolutionists even to invent a “just-so story” to explain a platypus!

Thus, there are no transitional forms leading up to the mammals. Furthermore, each of the 32 orders of mammals (rodents, insectivores, ungulates, primates, etc.) is drastically different from all others, with no intermediates!

However, it is within the mammalian orders themselves that evolutionists have professed to have some real paleontological evidence of evolution. The famous horse series, from *Eohippus* to *Equus*, is perhaps the most exploited. More recently, it seems to have been pre-empted in prominence by the whale supposedly evolving from a land mammal. Most important of all is the so-called case for *human evolution*. These will all be discussed in the next chapter.

⁴⁸ Stephen Jay Gould, “To Be a Platypus,” *Natural History*, vol. 94 (August 1985), p. 10, 14–15.

Chapter 4

Neither Did It Happen in the Recent Past

The Tertiary “period” is the so-called age of mammals and, finally, man. The great dinosaurian reptiles had all died, they say, at the end of the Cretaceous “period,” and the mammal-like reptiles even before that, so the mammals were then free to proliferate everywhere, so the story goes.

The best-publicized evolutionary series during this period is that of the horses, although the elephants and others supposedly went through changes also. The best case for evolution, at least in the past, has been the horse series, so we shall consider that first of all, as typical of the others.

The Horse Family Bush

According to the traditional scenario, there was first a small multi-toed animal denoted as *Eohippus*, the “dawn horse,” living in the Paleocene epoch about 60 million years ago. *Eohippus* is supposed to have evolved through a long series of other horses (called *Mesohippus*, *Miohippus*, *Pliohippus*, etc.), finally culminating in the modern horse *Equus*.

With the advance from one stage to another, the succession of horses increased in size, while their hooves devolved from five toes to three to one. This presumed “family tree” of horses has long been presented as one of the key proofs of evolution.

In recent years, however, all this has changed, and the horse tree has become a bush, with no one horse clearly descended from any other. The first in the series, *Eohippus*, was probably more like a hyrax than a horse, and should not even be included in the group at all. He is now again being

called *Hyracotherium* (which was the name given by its first discoverers, before certain North American paleontologists got the quaint notion that this little creature might be the ancestor of the horses, and perhaps also of the elephant).

Furthermore, this animal was quite stable, in terms of the standard geological column. Paleontologist Stephen Stanley notes the following:

Those who in the past have contemplated the formation of the modern horse by gradual evolution, beginning with this early genus, must now contend with the fact that at least two species of *Hyracotherium* lasted for several million years without appreciable change.¹

As a matter of fact, there has been much less change than evolutionists wish for, since *Hyracotherium* is clearly much the same as our modern hyrax. With respect to the modern horse, *Equus*, Stanley notes that it also has been highly stable:

It is notable that the evidence of great stability for species of *Hyracotherium* is complemented at the other end of equid phylogeny, by data showing that ten species of horses lived through most or all of Pleistocene time.²

As far as the intermediate horses are concerned (*Meshippus*, *Miohippus*, *Merychippus*, *Pliohippus*, etc.), it is now well-known that they no longer diagram into a tree, but a “bush.” There is much overlapping, and each is separated from the others without intermediate forms between. In the John Day strata of Oregon, the three-toed grazer *Merychippus* has been found in the same formation with the single-hoofed *Pliohippus*, for example. *Pliohippus* has also been found to be contemporaneous with the three-toed *Hipparion* in the Great Basin area, supposedly for several million years. No wonder David Raup says:

The record of evolution is still surprisingly jerky and, ironically, we have even fewer examples of evolutionary transition than we had in Darwin’s time. By this I mean that some of the classic cases of Darwinian change in the fossil record, such as the evolution of the horse in North America, have had

1 Stephen M. Stanley, “Macroevolution and the Fossil Record,” *Evolution*, vol. 36, no. 3 (1982), p. 464.

2 Ibid.

to be discarded or modified as a result of more detailed information.³

Once the little hyrax is taken out of the horse series, the remaining horses in the series could all well be viewed either as different varieties of the original created horse type or as separate created horse types. There is certainly no clear evidence that any one of them is the evolutionary ancestor of any other! For all that anyone can show to the contrary, their times could all have overlapped, or even all been the same. Dr. Stephen Stanley, one of the nation's top paleontologists and author of an important book on macro-evolution, has evaluated the significance of these fossil horses as follows:

The horse is the most famous example — the classic story of one genus turning into another, turning into another. Now it's becoming apparent that there's an overlap of these genera, and that there were many species belonging to each one. It's a very bushy sort of pattern that is, I think, much more in line with the punctuational model; there isn't just a simple, gradual transition from one horse to another. This is now becoming fairly well known.⁴

As a matter of fact, many natural history museums have completely revised their horse evolution exhibits in recent years. Although evolution is still assumed, it is not much emphasized any more in these exhibits. A "bush" does not lend itself as easily as a "tree" to evolutionary inference. Stephen Gould even regards the horse as an evolutionary failure, since all its "relatives" in the bush have become extinct.

If a clade has been markedly unsuccessful and now lies at the brink of extinction with but one surviving twig, then our anagenetic biases click in, and we often read the single extant path as an anagenetic trend. Thus we celebrate little, many-toed *Eohippus* marching towards the large, noble single-toed *Equus*. But *Equus* is the sole survivor of a tree once lush and vibrant (in an early Tertiary world with few artiodactyls and abundant perissodactyls). We speak of the anagenesis of horses

3 David M. Raup, "Conflicts between Darwin and Paleontology," *Field Museum of Natural History Bulletin*, vol. 50 (January 1979), p. 25. Raup is Curator of Geology at the Field Museum.

4 Stephen Stanley, "Resetting the Evolutionary Timetable," Interview by Neil A. Campbell, *Bioscience*, vol. 36 (December 1986), p. 726.

only because our biases abstract bushes as ladders. And the clade of horses has been so depleted that only one lineage remains to be misread as the terminus of a trend. All our textbooks cite horses as the prototypical evolutionary trend, but there is no classical tale about the evolutionary “trend” of antelopes, rodents, or bats — though these are the true success stories of mammalian evolution by the more appropriate criterion of increasing representation.⁵

This is an interesting line of reasoning, but it really has nothing whatever to do with genuine evolution. Whether one wants to talk about horses or rodents or any other mammalian order, there are a number of similar types within each group, but no evolutionary “tree” apparent in any one of them! Each order is completely distinct from all others and from any possible predecessors. Even within each order, the various members are all clearly distinct from each other, with no real transitional structures or transitional series anywhere. The “trees” found in evolutionist textbooks are all artificially constructed by selective picking off the family bush.

The Tale of the Walking Whale

The problem of marine mammals has been of great frustration to evolutionists. Mammals are supposed to have evolved only on land, by way of some uncertain reptilian ancestry, so the problem is how to account for whales and dolphins and other mammals that live in the sea. Many imaginative scenarios have been devised, whereby some ungulate or other terrestrial animal gradually went back to the sea again, with legs either mutating back into flippers or else becoming vestigial, and with a new apparatus for breathing. Here is the amazing tale of the whale:

The whale’s ascendancy to sovereign size apparently began sixty million years ago when hairy, four-legged mammals, in search of food or sanctuary, ventured into water. As eons passed, changes slowly occurred. Hind legs disappeared, front legs changed into flippers, hair gave way to a thick smooth blanket of blubber, nostrils moved to the top of the head, the tail broadened into flukes, and in the buoyant water world, the body became enormous.⁶

5 Stephen Jay Gould, “Trends as Changes in Variance: A New Slant on Progress and Directionality in Evolution,” *Journal of Paleontology*, vol. 62, no. 3 (1988), p. 321.

6 Victor B. Scheffer, “Exploring the Lives of Whales,” *National Geographic*, vol. 50 (December 1976), fold-out display.

The evolution of the dolphin proceeded in similar fashion, they say:

Dolphins evolved at least 50 million years ago from land mammals, that may have resembled the even-toed ungulates of today, such as cattle, pigs and buffaloes. After taking to the sea, dolphins became progressively better adapted to life in the water: their ancestral fur was replaced by a thick coat of blubbery fat, they became sleek and streamlined . . . their forelimbs were modified into steering paddles and . . . many species evolved a dorsal fin.⁷

These fascinating scenarios have not been gleaned from some child's book of fairy tales, as one might suppose, but from sober scientific articles in respected journals. They do lend themselves easily to cynical comment by creationists, and evolutionists have longed for *some kind* of transitional fossil to add a touch of credibility to them.

Philip Gingerich of the Museum of Paleontology at Michigan University has been a leader in this search.

Not far from the Khyber Pass in the arid Himalayan foothills of Pakistan, University of Michigan paleontologist Philip D. Gingerich found a skull and several teeth and came to the startling conclusion that they belonged to an ancient walking whale.⁸

He deduced that the skull and teeth belonged to a whale because of certain similarities to primitive whale fossils from India. As to how this skull indicated that the whale was walking, this was admittedly a guess based on the terrestrial nature of the sediments around it.

On a later trip, Gingerich found more fossil remains of the cranial area of this "whale," which had been named *Pakicetus*, and concluded that its ancestor was a hoofed wolf-like mammalian carnivore named *Mesonyx*. Again, however, no fossils of the body or leg bones were found.

We do not yet know anything about the post-cranial anatomy of early Eocene whales.⁹

7 Bernard Wursig, "Dolphins," *Scientific American* (March 1979), p. 138.

8 "Whales with Legs," *Science Digest* (November/December 1980), p. 25.

9 Philip D. Gingerich et al., "Origin of Whales in Epicontinental Remnant Seas: New Evidence from the Early Eocene of Pakistan," *Science*, vol. 220 (April 22, 1983), p. 405.

It was also found that *Pakicetus* was probably unable to hear under water, making it still more doubtful that it was a whale.

But Gingerich was persistent. In 1989, he turned his attention to a number of fossils from Egypt of a creature named *Basilosaurus*. As the name suggests, this was originally identified as a marine reptile when it was first excavated and described early in the 19th century. It was a long serpent-like sea creature, but did have certain mammal-like characteristics (as have various other extinct reptiles). When limb and foot bones were found by Gingerich near to articulated skeletons of *Basilosaurus*, he assumed that he had found his long-sought walking whale! He did acknowledge, however, that:

The inferred posture and range of motion of the hind limb of *Basilosaurus* are unusual for a mammal. . . . [They] appear to have been too small relative to body size to have assisted in swimming, and they could not possibly have supported the body on land.¹⁰

These limbs were obviously not mere vestiges, however, as they were too complex and well formed, with no suggestion of degeneracy. Accordingly (assuming that the limbs actually belonged to *Basilosaurus*), the following was concluded:

Thus hind limbs of *Basilosaurus* are most plausibly interpreted as accessories facilitating reproduction.¹¹

Gingerich and his associates probably have the right interpretation of the use of these limbs as “guides during copulation, which may otherwise have been difficult in a serpentine aquatic mammal.” But how does that make it a whale, let alone a walking whale? Most likely, it should continue to be regarded as a sea-going “king lizard,” which is the meaning of its name. Nevertheless, the evolutionists really needed a transitional form to make whale evolution seem somewhat feasible, so they still insist that that is what it is:

Temporal and morphological intermediates are direct and important evidence of transition in evolution: an Eocene whale with functional hind limbs narrows the gap considerably between generalized Paleocene land mammals that used hind

10 Philip D. Gingerich, B. Holly Smith, and Elwyn L. Simons, “Hind Limbs of Eocene *Basilosaurus*: Evidence of Feet in Whales,” *Science*, vol. 249 (July 13, 1990), p. 155.

11 Ibid., p. 156.

limbs in locomotion and Oligocene–Recent modern whales that lack pelvic limbs.¹²

Still more recent fossil digs in Pakistan turned up a strange fossil mammal with both front and hind limbs. It was called *Ambulocetus*,¹³ and may have been able both to swim in water and walk (like a sea lion) on land. It seems to have had a very long tail, without flukes. It was found in a much higher stratum than *Pakicetus*, so could hardly have been ancestral to it, even as it could hardly have been a descendant of it.

To a creationist, it would seem most reasonable that *Pakicetus* is an extinct wolf-like mammal, that *Basilosaurus* is an extinct marine reptile, that *Ambulocetus* is an extinct animal of no apparent affinity with anything else, and that *none of them* have any evolutionary connection with either modern or extinct whales. All were specially created with specific structures suitable for their particular environments, but they became extinct when their environments changed or when some catastrophe befell them.

Evolutionists indeed are desperate for transitional forms between major types of animals, and calling these odd creatures examples of transitional animals illustrates just how desperate they are. Nevertheless, the evidence surely, to one not bound to naturalistic preconceptions, is overwhelmingly on the side of creationism in this matter of marine mammals and their alleged relatives.

Now if *Archaeopteryx* and the horses and the mammal-like reptiles do not constitute transitional forms (and, as we have shown, they do not), and if these are the ones most cited by evolutionists as examples of transitional forms (and they are), then we are abundantly justified in concluding that there are *no real transitional forms* anywhere at all in the fossil record. This is amazing, if evolution is true. Statistically, there should be many transitional forms. In fact, if evolution is really true, it would seem logical that *all* creatures, living and extinct, should be transitional forms, in the process of evolving into new, higher forms. And yet there are none!

Men, Monkeys, and Missing Links

Of all the supposed evolutionary family trees, the one leading to man should be best documented. As the most recent evolutionary arrival, pre-human fossils have been exposed to decay processes for the shortest period of time, and so should be better preserved and easier to find than any others. Furthermore, since they are of greatest interest to man, more people have been looking for them than for any other kinds of fossils.

¹² Ibid.

¹³ See *Science*, vol. 263 (1994), p. 180, 210–212.

Consequently, if there are any real transitional forms anywhere in the fossil record, they should be most abundantly documented in the line leading from the first primate to modern man. Certainly, the finds in this field have been more publicized than in any other.

And yet after over 100 years of intensive searching, none have been found! The links are still missing. A few “hominid” bones and teeth have been found, which some anthropologists (not all, by any means) have argued were in the line of human evolution, but all of these are very doubtful, highly controversial, and extremely fragmentary. The general public has no idea just *how* fragmentary!

The fossils that decorate our family tree are so scarce that there are still more scientists than specimens. The remarkable fact is that all the physical evidence we have for human evolution can still be placed, with room to spare, inside a single coffin.¹⁴

And the obvious comment that one is almost compelled to make is that a coffin is exactly *where* it should be placed!

One of the nation’s leading paleoanthropologists, Yale’s David Pilbeam, makes a similar comment about the scarcity of data:

Human paleontology shares a peculiar trait with such disparate subjects as theology and extraterrestrial biology; it contains more practitioners than objects for study.¹⁵

There are not very many practitioners either, for that matter. Physical anthropology has had an impact on human thought far outweighing the normal influence of a very small and otherwise insignificant discipline. More recently, Pilbeam has admitted the following:

I know that at least in paleoanthropology, data are still so sparse that theory heavily influences interpretations. Theories have, in the past, clearly reflected our current ideologies instead of the actual data.¹⁶

14 Lyall Watson, “The Water People,” *Science Digest*, vol. 90 (May 1982), p. 44. More precisely, Colin Tudge has recently said that: “All that paleoanthropologists have to show for more than 100 years of digging are remains from fewer than 2000 of our ancestors. They have used this assortment of jawbones, teeth, fossilized scraps . . . to piece together a line of human descent going back 5 to 8 million years to the time when humans and chimpanzees diverged from a common ancestor,” *New Scientist*, vol. 146 (May 20, 1995), p. 24.

15 David Pilbeam and Stephen J. Gould, “Size and Scaling in Human Evolution,” *Science*, vol. 186 (December 6, 1974), p. 892.

16 David Pilbeam, “Rearranging Our Family Tree,” *Human Nature* (June 1978), p. 45.

Pilbeam, of course, is referring not to evolution in general, but to particular ideas about the sequences of human evolution. He is not about to become a creationist! Nevertheless, it seems odd that evolutionists can be so sure about evolution, when they admittedly know nothing as to how it works or what course it has followed.

Actually, no more is known about the evolution of apes (pongids) than that of man.

Unfortunately, the fossil record of pongids is nonexistent, making a glaring deficiency in the whole story.¹⁷

How is it, then, that evolutionists are so dogmatically insistent that apes and people have a common ancestor? So far as all real evidence goes, apes have always been apes and people have always been people. Yet, such anthropologists as Donald Johanson and the Leakeys have become world famous because of their excavation of a few handfuls of bones in Africa, which they claim give evidence of human evolution. Interestingly enough, Richard Leakey and Johanson have disagreed heatedly as to where their respective finds (known popularly as Lucy, Skull 1470, Handy Man, etc.) fit in the line of human evolution, but they are united in their opposition to any suggestion of human creation.

Some evolutionists (including evolutionist debaters) are so anxious to persuade people about man's evolution that they have deliberately ignored the physical evidence in order to arrange these so-called hominid fossils into what *looks like* an evolutionary family tree. They have, for example, taken all relevant data on cranial capacities, from the 500 c.c. capacities of the australopithecines (and modern gorillas) to the 1500 c.c. skulls of modern man, and published them in a graphical sequence purporting to show the gradual increase in brain size as man evolved. However, this "evolutionary line" is not a "time line," for the dates assigned to these skull fragments are widely divergent, with considerable evidence that *Australopithecus*, *Homo erectus*, and *Homo sapiens* have all lived contemporaneously in the past.

As a matter of fact, one could arrange the skull sizes of *living* human beings in a similar series, increasing from as low as 700 c.c. to over 2000 c.c., and this would have nothing whatever to do with evolution, since cranial capacity has no necessary correlation at all with human intelligence or mental ability — still less with the soul/spirit complex that completely separates man from all animals.

The fact is that, even after a century of intensive searching and special pleading, there is still no real fossil evidence of human evolution!

¹⁷ Ibid., p. 43.

Not surprisingly, despite the diligent research done in East Africa by paleontologists Richard Leakey and Donald Johanson, there are gaping holes in the evolutionary record, some of them extending for four to six million years.

Modern apes, for instance, seem to have sprung out of nowhere. They have no yesterday, no fossil record. And the true origin of modern humans — of upright, naked, toolmaking, big-brained beings — is, if we are to be honest with ourselves, an equally mysterious matter.¹⁸

Even the professional paleoanthropologists, though still firmly committed to an evolutionary faith, are in disarray as to the actual fossil histories.

All this makes a much more complex picture of hominoid evolution than we once imagined. It no longer resembles a ladder but is, instead, more like a bush. . . . Hominids evolved, as did many other mammal groups, with diverse and overlapping radiations. There is no clear-cut and inexorable pathway from ape to human being.¹⁹

Anthropologists are like the blind men looking at the elephant, each sampling only a small part of the total reality.²⁰

The simple idea of evolution, which it is no longer thought necessary to examine, spreads like a tent over all those ages that lead from primitivism into civilization. Gradually, we are told, step by step, men produced the arts and crafts, this and that, until they emerged in the light of history. Those soporific words “gradually” and “step-by-step,” repeated incessantly, are aimed at covering an ignorance which is both vast and surprising. One should like to inquire: Which steps? But then one is lulled, overwhelmed, and stupefied by the gradualness of it all, which is at best a platitude, only good for pacifying the mind, since no one is willing to imagine that civilization appeared in a thunderclap.²¹

18 Lyall Watson, “The Water People,” p. 44.

19 David Pilbeam, “Rearranging Our Family Tree,” p. 44, 45.

20 Alan Mann, as quoted in “Puzzling Out Man’s Ascent,” *Time* (November 7, 1977), p. 77. Mann is an anthropologist at the University of Pennsylvania.

21 Giorgio de Santillana and Hertha von Dechend, *Hamlet’s Mill* (Boston, MA: Gambit, Inc., 1969), p. 68.

The quotations above are from articles or books written two decades or more ago, but anthropologists continue to wrangle and speculate on these matters year after year.

Paleoanthropologists seem to make up for a lack of fossils with an excess of fury, and this must now be the only science in which it is still possible to become famous just for having an opinion. As one cynic says, in human paleontology the consensus depends on who shouts loudest.²²

The study of human origins seems to be a field in which each discovery raises the debate to a more sophisticated level of uncertainty.²³

The fervent arguments between Richard Leakey and Donald Johanson have been mentioned. More recently Johanson has been feuding vigorously with other anthropologists — especially Dr. Garniss Curtis and Tim White — on the staff at the University of California at Berkeley, leading to a lawsuit and almost to blows.²⁴ The arguments generally have to do with competition over funding and over priorities, as well as whose “ape-man” find is the oldest and most important. To an outsider, it does seem that every paleoanthropologist has his (or her) own agenda and ax to grind.

The subjective element in this approach to building evolutionary trees, which many paleontologists advocate with almost religious fervor, is demonstrated by the outcome: there is no single family tree on which they agree. On the contrary, almost every conceivable combination and permutation of living and extinct hominoids has been proposed by one cladist or another.²⁵

The authors of the above complaint against any cladistic approach to an evolutionary tree are, in turn, promoting their own biomolecular approach. They are certainly correct, however, in noting the numerous evolutionary lineages proposed for human beings.

22 J. S. Jones, “A Thousand and One Eves,” *Nature*, vol. 345 (May 31, 1990), p. 395.

23 Christopher B. Stringer, “The Legacy of Homo Sapiens,” *Scientific American*, vol. 268 (May 1993), p. 138.

24 David J. Jefferson, “This Anthropologist Has a Style That is Bone of Contention,” *Wall Street Journal* (January 31, 1995), p. 1.

25 Jerald Loewenstein and Adrienne Zihlman, “The Invisible Ape,” *New Scientist*, vol. 120 (December 3, 1988), p. 58.

If placed on top of one another, all these competing versions of our evolutionary highways would make the Los Angeles freeway system look like County Road 41 in Elkhart, Indiana.²⁶

Any discussion of specific fossils is out of date nearly as soon as published, so it is almost redundant to critique the hominids currently in vogue. The once-fashionable names of Java Man, Piltdown Man, Nebraska Man, Heidelberg Man, Rhodesia Man, Peking Man, and others that used to be offered as proof of man's evolution are nowadays all but ignored in anthropological discussions. Neanderthal Man and Cro-Magnon Man are now universally accepted as *Homo sapiens*. Even *Ramapithecus* is currently out of favor as an early hominid, being recognized now as simply an orangutan. All of the anthropologists agree, however, when it comes to fighting creationism.

We do need to consider in a little more detail the hominids that are currently in favor with most paleoanthropologists.

The Australopithecines

When one of the writers (H. Morris) was in school, it was commonly taught that the three conclusive proofs of human evolution were Piltdown man, Peking man, and Java man. These famous discoveries, however, are an embarrassment and are rarely taken seriously. Piltdown man was a hoax, Peking man has been lost for 50 years, and Java man was later admitted by its discoverer to be an artificial construct of a human thighbone and the skull of a gibbon. Other former "stars" in the ape-man extravaganza were Nebraska man (an extinct pig) and Neanderthal man (now universally acknowledged to be modern man).

The current "lead" in this long-running play is a supposed hominid (ape-man) named *Australopithecus* (meaning "ape of the south"), associated with a varied collection of fossil evidence, including Louis Leakey's *Zinjanthropus*, Richard Leakey's Skull 1470 and Donald Johanson's Lucy, as well as Mary Leakey's Laetoli fossil footprints. Although there has been sharp disagreement between Johanson and the Leakeys as to their "finds'" exact role in evolution, they all now maintain that these so-called "australopithecines" walked erect, like men, even though they had ape-like brains and skulls.

Nevertheless, the evidence against this view is growing. Dr. Yoel Rak describes the significance of the first-discovered australopithecine ear bone.

26 "Whose Ape Is It, Anyway?" *Science News*, vol. 125 (June 9, 1984), p. 361.

It is substantially different from that of a modern man, and the dissimilarity exceeds that between the ear bones of *Homo sapiens* and the African apes. The new incus (“anvil”) is of interest particularly in view of the unique advantages that ear ossicles (bones) have for taxonomic and phylogenetic (evolutionary) studies. The only other fossil hominid ear ossicles are from latseh and are indistinguishable from those of modern man.²⁷

That the australopithecines were simple apes of some kind is evident also from their skulls, which have long been recognized as having the brain capacity (about 500 cubic centimeters) of a true ape. It was long believed, however, that their brains were at least probably human-like in shape. This now also turns out to have been quite wrong.

I expected the australopithecine natural endocasts to appear like miniature replicas of human brains because that had been the prevalent view in the scientific literature since 1925. . . . My analysis of the seven known australopithecine endocasts shows Radinsky’s hunch was right: all of the convolutions that they preserve were apelike.²⁸

Although some scientists and many popular writers believe that man is descended from the australopithecines, many do not.

Interestingly, despite almost a decade of technically sophisticated analyses of australopithecine remains, there is still considerable controversy over their functional and phylogenetic significance — in particular whether they are too divergently specialized to be considered suitable ancestors for *Homo*.²⁹

The most sophisticated of these analyses were performed by Solly Zuckerman, Charles Oxnard, and their colleagues. These multivariate statistical analyses were computerized and highly detailed, showing almost conclusively that the australopithecines were some form of extinct ape, and that they did *not* walk erect. Oxnard’s evaluation was summarized as follows:

27 Yoel Rak, “Ear Ossicle of *Australopithecus Robustus*,” *Nature*, vol. 279 (May 3, 1975), p. 62.

28 Dean Falk, “The Petrified Brain,” *Natural History*, vol. 93 (September 1984), p. 38.

29 James A. Hopson and Leonard B. Radinsky, “Vertebrate Paleontology: New Approaches and New Insights,” *Paleobiology*, vol. 6 (Summer 1980), p. 263.

Although most studies emphasize the similarity of the australopithecines to modern man, and suggest, therefore, that these creatures were bipedal toolmakers . . . a series of multivariate statistical studies of various post-cranial fragments suggests other conclusions.³⁰

The conclusion was, essentially, that *Australopithecus* was an extinct ape, more like the orangutan than like any other living creature.

Some have argued, however, that Mary Leakey's 1978–79 finds of fossil footprints proved that *Australopithecus* did walk erect. These footprints indicated a bipedal creature, but the only reason for identifying them with *Australopithecus* was the fact that they were found in Africa and were dated radiometrically to correspond to the *assumed* age of *Australopithecus*. Consider, however, the following evaluation of them:

The uneroded footprints show a total morphological pattern like that seen in modern humans. . . . Spatial relationships of the footprints are strikingly human in pattern. . . . The Laetoli hominid trails at site G do not differ substantially from modern human trails made on a similar substrate.³¹

In other words, these trails are indistinguishable from trails of true human footprints. Why, then, try to make them out to be australopithecine footprints? Why not draw the much more reasonable conclusion, either that the dates are wrong, or else that man lived at the same time as the australopithecines?

Further evaluation of these footprints continues to favor the conclusion that they must be human tracks. The University of Chicago anthropologist Russell Tuttle has been studying them for some ten years. He says:

In sum, the 3.5-million-year-old footprint trails at Laetoli site G resemble those of habitually unshod modern humans. None of their features suggest that the Laetoli hominids were less capable bipeds than we are.³²

They could *not* have been made by any of the australopithecines, as many have assumed they were. Recent detailed studies of the actual

30 Charles Oxnard, *Nature*, vol. 258 (1975), p. 389.

31 P. H. Busse and K. E. Heikes, "Evolutionary Implications of Pliocene Hominid Footprints," *Science*, vol. 208 (April 11, 1980), p. 175.

32 Russell Tuttle, "The Pitted Pattern of Laetoli Feet," *Natural History* (March 1990), p. 64.

mechanics of australopithecine anatomy, made at the Natural History Museum of Paris, have conclusively demonstrated this.

The present results lead to the conclusion that the bipedalism of *Australopithecus* must have differed from that of *Homo* . . . the australopithecine walk differed significantly from that of humans, involving a sort of waddling gait, with large rotatory movements of the pelvis and shoulders around the vertebral column. . . . A previous paper has suggested that the pelvic proportions of *Australopithecus* could provide some arguments for an arboreal locomotion. The results of the present study suggest amplification of this opinion.³³

It does seem that true humans were living at the same time as the australopithecines, and that the Laetoli footprints were made by *them*, *not* by the hominids, regardless of the “age” of the tracks.

The latter conclusion, while contrary to the usual evolutionary prejudices, is not really so far-fetched, even in the framework of the standard geologic ages. It is now rather generally agreed by anthropologists that australopithecines were contemporaries of *Homo erectus*, even though some believe that the latter had evolved from the former. If that is the case, why could not *Homo sapiens* have been contemporaneous with both? Richard Leakey, for example, has described localities where fossils of *Homo erectus* and *Australopithecus* were found at the same level. But then he also reminds us of the following discovery, originally noted by his father Louis Leakey, but thereafter mostly ignored.

At one locality, remains of a stone structure — perhaps the base of a circular hut — were uncovered; there is an excellent date of 1.8 million years for this.³⁴

Now a circular stone hut could hardly have been constructed by anyone but a true human being, but the stratigraphic level of this structure was *below* the levels of fossils of both *Australopithecus* and *Homo erectus*! And then, how about the remarkable intimations from the new science of cladistics, especially when correlated with the assumed chronology of continental drift?

33 Christine Berg, “How Did the Australopithecines Walk? A Biomechanical Study of the Hip and Thigh of *Australopithecus afarensis*,” *Journal of Human Evolution*, vol. 26 (April 1994), p. 271.

34 Richard Leakey, “Hominids in Africa,” *American Scientist* (March/April 1976), p. 177.

After showing that “cladograms” (diagrams of assemblages of physiologic and morphologic similarities, used to deduce relationships) of birds, butterflies, reptiles, and plants correspond globally with the chronology of splitting and drifting continents, two specialists in this field proceeded to show that cladograms of human beings, when classified according to race, language, and biochemistry, show exactly the same type of correlation. But the primeval super-continent is supposed to have split and initiated the development of these relationships about 80 million years ago. Consequently, these authors pose the following question:

Would we not have to consider the possibility that humans also are that old, and have been affected by the same events?³⁵

This would mean that man is not only as old as the australopithecines, but also as old as the dinosaurs! To the creationist, of course, this is eminently reasonable. Many “anomalous” human fossils and artifacts have been reported throughout the geologic column, but these have been commonly ignored or explained away by evolutionists.

But that is another story. The point we emphasize here is that the fossil record of man and the apes, like that of all other creatures, is one that testifies to the stability of the basic created kinds, variation within the kinds, occasional extinction of kinds, with clear-cut and permanent gaps between the kinds. There has never been any *real* evolution.

The Enigma of Homo Erectus

Another group of fragmentary fossils, collectively known as *Homo erectus*, is believed by many paleoanthropologists to be intermediate between *Australopithecus* and *Homo sapiens*. Peking man and Java man, once believed to be in this group, are now mostly ignored. However, other fossils of *Homo erectus* have since been found in both Asia and Africa, and possibly even in Australia. These have been so identified mostly by their brain capacities, usually in the 700–800 c.c. range.

This factor alone, however, does not prove anything, since a considerable number of fully normal modern human beings are known to have skull capacities in this range. Furthermore, many modern people have

35 Gareth Nelson and Norman Platnick, *Systematics and Biogeography* (New York: Columbia University Press, 1981). Of course, if evolutionists cannot be persuaded by fossil footprints, they will probably not be influenced by cladograms.

heavy brow ridges and low sloping foreheads, so these features don't mean much either. One problem has been that the apparent ages of *Homo erectus* remains have often overlapped the dates assigned to *Australopithecus*, so that the two families are known now to have been living contemporaneously, and even in the same geographical areas.

There is no doubt that *Homo erectus* ("erect man") had an upright posture. That he was truly human, rather than an erect ape, has possibly been confirmed by studies of the brain endocast from the skull known as "1470," discovered a number of years ago by Richard Leakey.

An endocast from the Kenya National Museum, a *Homo habilis* specimen known as ER 1470, reproduces a human-like frontal lobe, including what appears to be Broca's area.³⁶

Since this part of the brain (Broca's area) is known to control speech, and is uniquely human, it seems possible that at least this particular *Homo erectus* specimen was a true man, even though his cranial capacity was just over 750 c.c. This skull remains controversial (ER 1470 is even considered by some anthropologists to be an australopithecine) and is still commonly called *Homo habilis*, assumed intermediate between *Australopithecus* and *Homo erectus*. Nevertheless, as Falk says:

If we wish to identify one prime mover of human brain evolution, the endocast from ER 1470, with its human-like frontal lobes that contain what appears to be Broca's speech area in the left hemisphere, confirms what is suggested by comparing the behavior of apes and humans: it is language.³⁷

The fact that *Homo erectus* was a true man, rather than an ape-human intermediate of some kind, has been further confirmed by the discovery in late 1984 of the most complete *Homo erectus* skeleton found to date, a boy estimated to be 12 years old, excavated in Kenya, and believed by evolutionists to have lived about 1.6 million years ago, as based on radiometric dating of the ash deposits in which it was found by anthropologists Richard Leakey and Alan Walker.

The new find reveals that these ancient people had bodies virtually indistinguishable from our own. . . . The skeleton

36 Dean Falk, "The Petrified Brain," p. 38.

37 Ibid., p. 39.

showed that the boy stood 5 feet 6 inches, taller than many of today's 12 year olds.³⁸

Except for the brain size (about 880 c.c.), the skull and jaw-bone looked "much like a Neanderthal."³⁹ Neanderthal man, of course, is now acknowledged by all evolutionary anthropologists to be true man, *Homo sapiens*. Therefore, while *Australopithecus* was simply an ape of some kind, it is almost certain that *Homo erectus* was a true man, similar in some ways to the extinct Neanderthal tribe. Quite possibly, fossils have been identified as *Homo erectus*, rather than *Homo sapiens*, simply because they happened to be members of the human race whose brain sizes were at the low end of the normal spectrum of brain-size variation, but otherwise they were probably normal human beings.

Further studies of this Kenya fossil seem to support the possibility that — except for the very old date assigned to it and the African location — it could almost be grouped with the Neanderthals, which are now universally recognized as *Homo sapiens*. At any rate, the *Homo erectus* designation groups it and all others of that type within the family of *Homo* — that is, "man." In the absence of any living members of that "tribe," it is impossible to say anything about their language or other means of communication.

Language, of course — that is, the ability to communicate in abstract, symbolic, intelligible speech, whether verbal or written — is the one essential attribute that distinguishes true man from apes or other animals. And, as just noted, *Homo erectus* meets that test, even if his cranial capacity was at the lower end of the human spectrum. (And even *that* is within the range of modern man!)

That does bring up the subject of Neanderthal man. Although their brain capacity was somewhat *above* the modern average, many have argued that the heavy Neanderthal jawbones would have made speech impossible for them. This has turned out to be wrong:

Paleontologists in Israel have discovered a fossil bone which shows that Neanderthals may have been just as capable of speech as modern humans. The bone, known as the hyoid, is from a Neanderthal who lived between 50,000 and 60,000 years ago. The hyoid, a small v-shaped bone, is a key part of the vocal apparatus in modern human beings. . . . According to B. Arensburg and Yoel Rak of Tel Aviv University and their

38 Boyce Rensberger, "Human Fossil is Unearthed," *Washington Post* (October 19, 1984), p. A1.

39 Ibid.

colleagues, the fossil hyoid, in size and shape is just like a modern human's (*Nature*, vol. 338, p. 758). The positions of the muscle attachments are also similar. The researchers believe that, despite their heavy jawbones, Neanderthals spoke a language.⁴⁰

In February, at the annual meeting of the American Association for the Advancement of Science, University of Kansas paleoanthropologist David Frayer presented a survey of accumulating data, including the discovery of the hyoid bone and a new reconstruction of an old Neanderthal skull, in launching a new attack on the idea that Neanderthals couldn't speak.⁴¹

It was already well-known that both Neanderthal man and Cro-Magnon man not only were human in anatomy and brain size, but also buried their dead, made tools, grew flowers, painted pictures, and showed other aspects of a truly human culture. Neanderthal's somewhat stooped posture, heavy skull, and other physical peculiarities may have been the result of disease or dietary deficiencies — possibly even old age — but they certainly were within the range of modern human attributes. We are warranted in concluding that Neanderthal, Cro-Magnon, and *Homo erectus* were *all created human beings*, whereas *Australopithecus* was a *created* but now *extinct* ape.

The Uniqueness of Human Language

The most important physical ability distinguishing man from apes and other animals is undoubtedly his remarkable capacity for language. The ability to communicate with others of his own kind in abstract, symbolic speech is unique to man, and the evolutionist has never been able to bridge the tremendous gulf between this ability and the grunts and barks and chatterings of animals.

Some researchers have, of course, made extravagant claims as to the potentiality of teaching chimpanzees to speak, for example, or have developed highly imaginative speculations as to how animal noises may have evolved into human languages. Such notions are, however, not based on real scientific observation or evidence.

40 Sarah Bunney, "Neanderthals Weren't So Dumb After All," *New Scientist*, vol. 123 (July 1, 1989), p. 43.

41 Ann Gibbons, "Neanderthal Language Debate: Tongues Wag Anew," *Science*, vol. 256 (April 3, 1992), p. 33.

Man's brain is quite different from that of chimpanzees, especially in that portion which controls speech. Isaac Asimov noted this in these words:

Once speech is possible, human beings can communicate thoughts and receive them; they can consult, teach, pool information. . . . Once speech was developed, then the evolution of intelligence proceeded rapidly. The chimpanzee lacks Broca's convolution, but it may have the germs of communication, which could develop rapidly if it ever evolved that part of the brain.⁴²

Realistically, however, one does not acquire a brain capable of abstract thought and intelligent speech (even if "Broca's convolution" is really all that the brain needs to do this) merely by allowing "evolution" to create one because it might be helpful. Two top authorities on supposed human evolution, David Pilbeam and Stephen Gould, anthropologist at Yale and invertebrate paleontologist at Harvard, respectively, have pointed out that man's brain shape is not a mere scaled-up replica of the ape's, but is qualitatively distinct in critical ways.

Homo sapiens provides the outstanding exception to this trend among primates, for we have evolved a relatively large brain and small face, in opposition to functional expectations at our size. . . . *Australopithecus africanus* has a rounded braincase because it is a relatively small animal; *Homo sapiens* displays this feature because we have evolved a large brain and circumvented the expectations of negative allometry. The resemblance is fortuitous; it offers no evidence of genetic similarity.⁴³

Though creationists do not share the credulous faith of evolutionists that man's unique brain has simply "evolved," they do concur with the inference that this uniqueness has placed an *unbridgeable gap* between man and any of the animals.

Evolutionist George Gaylord Simpson admitted that there is little possibility of tracing an evolutionary connection between animals and men, as far as language is concerned.

42 Isaac Asimov, "Chimps Tell Us About Evolution," *Science Digest*, (November 1974), p. 89.

43 David Pilbeam and Stephen Jay Gould, "Size and Scaling in Human Evolution," *Science*, vol. 186 (December 6, 1974), p. 899-900.

Human language is absolutely distinct from any system of communication in other animals. . . . It is still possible, but it is unlikely, that we will ever know just when and how our ancestors began to speak.⁴⁴

Since Simpson was a biologist and paleontologist, rather than a linguistics scientist, certain of the younger speculative linguists may feel that he was speaking out of his field, and that it may yet be possible to trace such an evolutionary origin of human language. However, many modern linguistic specialists today would acknowledge Dr. Noam Chomsky, Professor of Linguistics at the Massachusetts Institute of Technology, to be the world's foremost linguist. According to Gunther Stent, Dr. Chomsky has said:

Human language appears to be a unique phenomenon, without significant analogue in the animal world.⁴⁵

As to whether the gap between animal noises and human language was ever bridged by evolution, Dr. Chomsky asserts the following:

There is no reason to suppose that the "gaps" are bridgeable. There is no more of a basis for assuming an evolutionary development of "higher" from "lower" stages, in this case, than there is for assuming an evolutionary development from breathing to walking.⁴⁶

In other words, there is no comparison at all!

Chomsky and many other modern linguists have found, not only that there is no connection between animal sounds and human speech, but also that there is a deep commonality between the basic thought patterns of all men, regardless of how diverse their individual languages may be. That is, there is a fundamental connection between all human languages, but *no connection at all* between human language and animal "language."⁴⁷

Dr. Gunther S. Stent (professor of molecular biology at the University of California in Berkeley) has drawn the further inference from Chomsky's studies that man has a certain fundamental being that is incapable of being reached by scientific analysis.

44 George Gaylord Simpson, "The Biological Nature of Man," *Science*, vol. 152 (April 22, 1966), p. 476, 477.

45 Gunther S. Stent, "Limits to the Scientific Understanding of Man," *Science*, vol. 187 (March 21, 1975), p. 1054.

46 Ibid., p. 68.

47 Noam Chomsky, *Language and Mind* (New York: Harcourt, Brace, Jovanovich, Inc., 1972), p. 67.

Chomsky holds that the grammar of a language is a system of transformational rules that determines a certain pairing of sound and meaning. It consists of a syntactic component, a semantic component, and a phonological component. The surface structure contains the information relevant to the phonological component, whereas the deep structure contains the information relevant to the semantic component, and the syntactic component pairs surface and deep structures.⁴⁸

Chomsky and his associates have developed what they call *structural linguistics*, with its concepts of the “deep” structure and the “surface” structure. The latter involves the ordinary phenomena of different languages and their translation one into the other. The mere fact that people are able to learn other languages is itself evidence of the uniqueness and fundamental unity of the human race. No such possibility exists between man and animals.

The “deep structure” is the basic self-conscious thought structure of the man himself, and his intuitive formulation of discrete thoughts and chains of reasoning. The vocal sounds that he uses to transmit his thoughts to others may vary widely from tribe to tribe, but the fundamental thought system is there, and is universal among mankind.

The semantic component has remained invariant and is, therefore, the “universal” aspect of the universal grammar, which all natural languages embody. And this presumed constancy through time of the universal grammar cannot be attributable to any cause other than an innate, hereditary aspect of the mind. Hence, the general aim of structural linguistics is to discover this universal grammar.⁴⁹

Presumably, if this “universal grammar” could ever be ascertained, it would supply the key to man’s original language — perhaps even its phonology and syntactical structure, as well as its semantic content.

Evolutionists, as well as creationists, have in recent years come to believe in the monophyletic origin of all the tribes and races of mankind. Most of the earlier evolutionists, however, believed in man’s polyphyletic origin, thinking that each of the major “races” had evolved independently from a different hominid line. This idea, of course, easily leads to racism,

48 Stent, “Limits to the Scientific Understanding,” p. 1054.

49 Chomsky, *Language and Mind*, p. 68.

the belief that one race is innately superior to another race. That is, if each race has had a long, independent evolutionary history, slowly developing its distinctive character by the lengthy process of random mutation and natural selection, then it is all but certain that there has been a differential rate of evolution between the different races, with some evolving to higher levels than others. That such racist beliefs were held by all 19th-century evolutionist scientists (Darwin and Huxley included) has been thoroughly documented.⁵⁰

Modern evolutionists, however, repudiate racism, which has become sociologically unpopular in the 20th century. Although they are now in practically complete agreement that all present groups of men came originally from one single population of ancestral men, they are currently in complete confusion as to exactly what that lineage may have been. In any case, man has always been man, culturally and linguistically, as well as physically and mentally.

Consider this ancestral human population, whenever and however it first appeared — whether several million years ago, newly arrived by an unknown evolutionary process from unknown evolutionary ancestors, or only several thousand years ago. In either event, they must have constituted an originally coherent body of true men, all with the same language and culture.

The question then is, how did the different languages ever develop? If the “semantic component” of language, as Chomsky puts it, is still the same for all men, how did the “phonologic component” ever become so diverse and variegated? Gradual changes are understandable (as in the gradual accretion of Latin words, Greek words, Germanic words, etc., to produce the modern English language), but how could such vastly different linguistic systems as the Indo-European languages, the agglutinative languages of the Africans, and the tonal languages of the Mongols ever develop from a single ancestral language?

Furthermore, the *more ancient* languages seem to be the *more complex* languages, as do the languages of the more apparently “primitive” tribes living today.

Even the peoples with least complex cultures have highly sophisticated languages, with complex grammar and large vocabularies, capable of naming and discussing anything that occurs in the sphere occupied by their speakers. The oldest

50 John S. Haller, Jr., *Outcasts from Evolution* (Urbana, IL: University of Illinois Press, 1971).

language that can reasonably be reconstructed is already modern, sophisticated, complete from an evolutionary point of view.⁵¹

Not only so, but the history of any given language, rather than representing an increasingly complex structure, as the structure of its users supposedly evolved into higher levels of complexity, seems, instead, to record an inevitable decline in complexity.

The evolution of language, at least within the historical period, is a story of progressive simplification.⁵²

It seems necessary to assume either of two alternatives in order to explain these strange linguistic phenomena:

1. An original population of men, at least 100,000 years ago and possibly up to four million years ago, with a highly complex language and culture. This original population (its origin completely unknown and apparently inexplicable on evolutionary grounds) somehow broke up into a number of separate populations, each then developing independently of the others for such a very long time that its extreme peculiarities of linguistic phonology and syntax could emerge as a deteriorative remnant of the ancestral language.
2. An original population of men several thousand years ago. This population once used the postulated complex common-ancestral language, but somehow broke up into the assumed smaller populations. However, this breakup was not a slow evolutionary process over hundreds of thousands of years, but rather was accomplished in some kind of traumatic separation, accomplished essentially instantaneously by a sudden transmutation of the one phonology into a number of distinctively and uniquely different phonologies.

Neither of these alternatives is amenable to an evolutionary interpretation, since neither accounts for the original ancestral complex language, and since both involve a subsequent deterioration (rather than evolution) of language complexity. The former, however, is favored by evolutionists because the great time spans involved seem more suitable to a uniformi-

51 Simpson, "Biological Nature of Man," p. 477.

52 Albert C. Baugh, *A History of the English Language* (New York: Appleton-Century-Crofts, Inc., 1957), p. 10.

tarian philosophy, and because the latter clearly involves catastrophic, even supernaturalistic intervention in human history.

The long-time-span interpretation, however, necessarily involves the evolution model once again in its racist connotations. For how are populations going to be separated long enough to develop such drastically different languages, without also developing drastically different physical features and mental abilities? As long as they were together, or even closely enough associated to be in communication with each other (and such association would surely be to their mutual advantage), they would retain an essentially common language, would intermarry, and thereby retain common physical and mental characteristics as well.

Yet the languages and cultures and physical features are, indeed, quite different, and have been so since the dawn of recorded history! A genetics professor at Stanford says:

When we look at the main divisions of mankind, we find many differences that are visible to the unaided eye. . . . It is highly likely that all these differences are determined genetically, but they are not determined in any simple way. For example, where skin color is concerned there are at least four gene differences that contribute to variations in pigmentation.⁵³

If such an apparently simple and obvious difference as skin color is determined in such a complex fashion, and if all such gene factors have developed originally by mutation (as evolutionists believe), then a very long period of racial segregation must have been necessary.

The simplest interpretation of these conclusions today would envision a relatively small group starting to spread not long after modern man appeared. With the spreading, groups became separated and isolated. Racial differentiation followed. Fifty thousand years or so is a short time in evolutionary terms, and this may help to explain why, genetically speaking, human races show relatively small differences.⁵⁴

Furthermore, if obvious differences such as skin color and facial morphology can arise by mutation and selection in 50,000 years, then

53 L. L. Cavalli-Sforza, "The Genetics of Human Populations," *Scientific American*, vol. 231 (September 1974), p. 85.

54 *Ibid.*, p. 89. From what has been noted, however, it is obvious that even the author's 50,000 year estimate is much too small in the evolution framework. Even this shorter time, however, would surely involve significant racist connotations.

surely subtle differences in mental abilities could also arise in such a time, and these would have considerably more selection value for survival than would skin pigmentation. The inferences for racism are again very obvious and ominous!

As a matter of fact, as creationists have repeatedly pointed out, there is no empirical evidence of mutations that confer any kind of “beneficial” effect in the natural environment upon either the individuals or the populations that experience them. The various physical changes (skin color, etc.) can be much more easily explained as *created* genetic factors that were latent in the human genetic system ever since the creation, but which could become openly expressed only in a small population being forced to reproduce by inbreeding after segregation from its ancestral population.

If the initial population were somehow forced to break up into small reproductively isolated populations, only a relatively small number of generations would be required to allow distinctive physical characteristics (all representing created genetic factors already present, though latent, in the larger population) to become manifest and fixed in different combinations in the different tribal clans.

The enforced segregation would most expeditiously be arranged by the postulated sudden transmutation of the ancestral phonology (spoken language) into a number of uniquely different phonologies. No other traumatic changes would be necessary, as the physical changes would easily and quickly develop genetically from the linguistic segregation.

Furthermore, no basic change in human nature would be involved. All would still “think” in the same way and would still be, distinctively, men. The “deep structure” of human consciousness and communicative ability would be unaffected even by a traumatic change in the “surface structure.” Dr. Stent makes an incisive comment in this connection.

Hence it is merely the phonological component that has become greatly differentiated during the course of human history, or *at least since the construction of the Tower of Babel*.⁵⁵

Whether or not Dr. Stent believes in the confusion of tongues at Babel as a real event of history, it is at least symbolic to him of the fact that there must have at one time been some such division, and that no normal evolutionary development could accomplish it! To the creationist, of course, Babel is not only symbolic, but actual. The supernatural confusion

55 Stent, “Limits to the Scientific Understanding,” p. 1054.

of phonologies, with its resultant tribal dispersions throughout the world, and its logical genetic consequences in the rapid emergence of distinctive tribal characteristics, fits all the known facts of philology, ethnology, and archaeology perfectly.

Furthermore, man's universal semantic consciousness is at once an attestation of his uniqueness in the living world, and of the inability of naturalistic science to comprehend this deep inner nature of man. Dr. Stent himself recognizes this as follows:

No matter how deeply we probe into the visual pathway, in the end we need to posit an "inner man" who transforms the visual image into a precept. And as far as linguistics is concerned, the analysis of language appears to be heading for the same conceptual impasse as does the analysis of vision.⁵⁶

Chomsky and the other structural linguists have found it necessary to postulate a "deep structure" of self-consciousness, but they do not know where this "inner man" comes from, nor how it functions. Materialistic science can explain much with its chemical and physical equations, but it flounders when it reaches the domain of "soul" and "spirit." Stent continues as follows:

That is to say, for man the concept of "meaning" can be fathomed only in relation to the self, which is both ultimate source and ultimate destination of semantic signals. But the concept of the self . . . cannot be given an explicit definition. Instead, the meaning of "self" is intuitively obvious. It is another Kantian transcendental concept, one which we bring *a priori* to man just as we bring the concepts of space, time, and causality to nature.⁵⁷

The concept of "self" may be intuitively obvious, but its *cause* is not so obvious, at least not to an evolutionist. Its reality is found to be necessary, even by naturalistic science, but as an "effect," it requires an adequate "cause," and no naturalistic cause is available to explain it. A supernatural Creator is required!

All of which leads to the conclusion that the *ultimate* purpose of language is not merely for communication between man and man, but even more for communication between man and his maker.

⁵⁶ Ibid.

⁵⁷ Ibid., p. 1057.

Chapter 5

Evolution Never Happened at All

We have seen that the predictions of the creation model have been precisely confirmed with respect to the systems and processes of the present, and also with respect to the fossil record of the past. That is, there have always been distinct types of plants and animals, with clear-cut and apparently permanent gaps between them. Each type is highly complex and is organized to function in its environment. There is no evolutionary flux apparent at all, except for small “horizontal” changes at the same level of complexity. Each organism thus has the ability to adapt (within limits) to changing environments without becoming extinct.

All of this is predictable from the creation model, and it does not at all support the evolution model. Nevertheless, it does not *prove* creation, and evolutionists are perpetually modifying their model to try to make it fit the data. In recent years, there has been a widespread shift to a “saltational” model of evolutionary change, which purportedly predicts such “gaps” in the record. To creationists, this ploy seems to be a reluctant and unacknowledged recognition that the creationists’ predictions were right after all. It is essentially just a desperate attempt to account for creation without a Creator, and it still will not work!

Punctuated Equilibrium — Evolution’s Last Stand

The mystery of the ubiquitous lack of transitional forms has not silenced doctrinaire evolutionists. They used to explain these gaps by the lack of fossils, but fossils are so abundant now that they know the gaps are real! Consequently, many have fallen back (though not all) to a concept of evolution by quantum leaps.

One of the most noticeable aspects of the theory of evolution, therefore, is its own continuing evolution! One would think that after almost 150 years of intensive study of supposed evolutionary mechanisms, everyone should know by now how it works. But the fact is that evolution is no better understood now than it was in the days of Charles Darwin. Evolutionists protest (too much, in fact) that they *know* evolution is true, but it must be embarrassing for them to have to admit repeatedly that they still don't understand its mechanism!

The latest idea is *stasis* — that is, stability, “standing still.” Paleontologist Steven M. Stanley (Johns Hopkins University) says:

The [fossil] record now reveals that species typically survive for a hundred thousand generations, or even a million or more, without evolving much. We seem forced to conclude that most evolution takes place rapidly, when species come into being by the evolutionary divergence of small populations from parent species. After their origins, most species undergo little evolution before becoming extinct.¹

Similarly, Harvard University paleontologist Stephen Gould has said:

Thus, our model of “punctuated equilibria” holds that evolution is concentrated in events of speciation and that successful speciation is an infrequent event punctuating the stasis of large populations that do not alter in fundamental ways during the millions of years that they endure.²

This is certainly fascinating. *Evolution*, which means “change,” is characterized mainly by *stasis*, which means “no change!” The “punctuations” that produce new species occur so rapidly and so rarely that they can never be observed. Since we can never observe evolution in action, it is presumed to happen very rapidly when we are not looking. No wonder it has been so hard to learn how evolution works!

All this brings us to the amazing new concept known as *punctuated equilibrium*. This idea was introduced in this country only in 1971 by Niles Eldredge and Stephen Jay Gould (though it had previously been popular in Russia), but it is now rapidly gaining dominance over the field as far as evolutionary theory is concerned. It is the product *not* of any evidence —

1 Steven M. Stanley, *The New Evolutionary Time-table: Fossils, Genes and the Origin of Species* (Basic Books, Inc., 1981), preface.

2 Stephen Jay Gould, “Is a New and General Theory of Evolution Emerging?” *Paleobiology*, vol. 6, no. 1 (1980), p. 125.

but rather of *lack* of evidence — for evolution. Since the universal absence of transitional forms in both the fossil record and the living world had shown that slow-and-gradual evolution was invalid, and since the traditional mutation/selection mechanism of neo-Darwinism had proved impotent to generate anything of consequence, many evolutionists have finally decided that they must resort to *revolutionary evolutionism*.

The only alternative seems to be creationism, and that, to the leaders of evolutionary thought, is unthinkable heresy. So, instead of turning to God, they attribute the generation of each new kind of organism to some mysterious genetic upheaval, some remarkable embryonic saltation, some lucky leap of jumping genes, transforming a decadent population of organisms in equilibrium, through a dynamic punctuation in that equilibrium, to a new and higher degree of biologic existence! Thus, paradoxically, the main characteristic of evolution has become stability, and evolutionism is now an oxymoron. The mechanism of evolution is long periods of equilibrium punctuated by brief but dynamic episodes of chance upheavals, which heave things up instead of down.

This is an amazing excursus into the logic of wonderland. Since species survive indefinitely without significant change (except extinction), therefore, they evolve very rapidly! Creationists, of course, have long emphasized this stability of basic types. That is exactly what the “creation model” predicts: primeval completed creation and subsequent conservation of the biologic kinds. But evolutionists reject creationism not because of the testimony of science, but because of their commitment to naturalism.

Because of this innate rebellion against the concept of creation, the modern school of evolutionists has turned to a theory for which there is no mechanism and no evidence! Stanley and others like to emphasize what they call “quantum speciation,” since there is no evidence for gradual evolution, even at the species level. If the origin of new species is inexplicable, however, the origin of higher categories (genera, families, orders, etc.) is far more so. We have already quoted Gould on the impossibility of accounting for the origin of the *Baupläne* (phyla) by any form of gradualism (see page 70).

The evolutionist has long used mutations as his explanation of the origin of new features in organisms. The main problem has been that real mutations always turn out to be harmful. In fact, individual creatures that experienced significant mutations were once commonly called “monsters” (or “aberrations” or “freaks”), since they were seriously handicapped — if they survived at all.

In the 1930s and 1940s, two leading scientists proposed that occasional “hopeful monsters,” as they called them, must have been the means by which evolution had advanced. Europe’s top paleontologist, O. H. Schindewolf, and Richard Goldschmidt, one of America’s outstanding geneticists, vigorously promoted this idea, pointing out that everything known about genetics and paleontology showed that slow-and-gradual evolution *had* not occurred and *could* not occur. However, neo-Darwinism prevailed at the time, and the hopeful-monster idea was mostly ridiculed, despite the high reputations of its advocates.

Now, however, evolutionists finally are acknowledging that slow-and-gradual evolution really doesn’t work after all, and the “hopeful monster” is being taken seriously. Gould has actually written a key article called “The Return of Hopeful Monsters” (*Natural History*, July 1977), predicting that Goldschmidt soon will be vindicated. Stanley also has referred to this concept in several places. For instance, he illustrates it with a familiar example:

Schindewolf believed that a single *Grossmutation* could instantaneously yield a form representing a new family or order of animals. This view engendered such visions as the first bird hatching from a reptile egg.³

Regardless of the terminology that may be preferred, however — hopeful monster, *Grossmutation*, quantum speciation, punctuated equilibrium, or whatever — the facts are still the same. There are no transitional forms, and there is no known mechanism that will accomplish gradualistic evolution. Consequently, if one will not accept creation, he simply has to believe in some as-yet-undiscovered mechanism that will cause new and more complex organisms to evolve all at once — or at least so rapidly as to leave no record of the few intermediate steps. No such example has been recorded in all human history (stories of frogs turning into princes are not found in history books!), but there seems to be no other alternative.

Is the punctuated-equilibrium/hopeful monster concept really a plausible option? It would seem that, if slow-and-gradual evolution must be rejected for lack of evidence, then sudden evolution must be *even more vigorously rejected*, for its evidence is not only missing, but inconceivable. One of the most revered of the neo-Darwinians, population geneticist Sewall Wright, has protested as follows:

3 Stephen M. Stanley, *Macroevolution: Pattern and Process* (San Francisco, CA: W. H. Freeman and Co., 1979), p. 35; see also p. 159.

The reorganization required for the origin of the highest categories may seem so great that only “hopeful monsters” will do. Here, however, we must consider the size and complexity of the organisms. Such changes would probably have been impossible except in an organism of very small size and simple anatomy. I have recorded more than 100,000 newborn guinea pigs and have seen many hundreds of monsters of diverse sorts, but none were remotely “hopeful,” all having died shortly after birth if not earlier.⁴

Can anyone seriously believe that the first bird really hatched out of a *reptile egg*? Actually, there would have to be at least two such hopeful monsters — one male and one female — occurring simultaneously in the same population, in order to assure survival of the new type. It would seem that one could as easily believe in a fairy godmother with a magic wand!

Evolutionists sometimes insist that the punctuated equilibrium concept applies only to sudden change at the species level, and so should not be confused with the hopeful-monster idea, which presumably would apply, if at all, only to higher categories. However, Gould and other punctuationists have frequently referred to the sharp gaps between phyla, classes, orders, and families as evidence in favor of punctuated equilibrium. At any rate, the fact remains that there are no true transitional forms (with transitional structures) between these higher categories.

Considerable resistance to this punctuated equilibrium concept is evident among evolutionists (as well there should be!), but it has probably become the dominant view. We have already noted the admitted difficulty of even imagining viable intermediate forms in the gradualistic evolutionary alternative, as well as the complete lack of fossil evidence for it. If evolutionists were really willing to take the scientific evidence seriously, they would have to conclude that *neither* gradual upward evolution *nor* saltational upward evolution has ever occurred, and that neither ever could occur.

But this conclusion would make them creationists! That would be too much for them emotionally and spiritually, so they continue to insist that evolution is a fact, hoping that they can impose their humanistic faith on others by weight of authority and peer pressure.

⁴ Sewall Wright, “Character Change, Speciation, and the Higher Taxa,” *Evolution*, vol. 36, no. 3 (1982), p. 440.

Even though Gould more recently has denied believing in Goldschmidt's "hopeful monster" concept, he, nevertheless, has defended its main thesis:

As a Darwinian, I wish to defend Goldschmidt's postulate that macroevolution is not simply microevolution extrapolated and that major structural transitions can occur rapidly without a smooth series of intermediate stages.⁵

Of course, both Goldschmidt and Gould were driven to such an extremity as hopeful monsters by the intractable facts of the fossil record, which they have been honest enough to acknowledge. Gould concedes this in another article:

The extreme rarity of transitional forms in the fossil record persists as the trade secret of paleontology. . . . We fancy ourselves as the only true students of life's history, yet to preserve our favored account of evolution by natural selection we view our data as so bad that we never see the very process we profess to study.⁶

The creationist, however, does not have to invent such whimsical and bizarre explanations for the gaps in the fossils. The creationist *predicted* the gaps! They provide positive evidence for the creation model.

Creationists are not the only ones who recognize the absurdity of making this complete absence of evolutionary transitional forms a basic feature of the new evolution model! Evolutionist philosopher Larry Azar raises this question in *Bioscience*:

I can understand the inherent difficulty in attempting to discover intermediate forms. My problem concerns the *methodology* of science: If an evolutionist accepts gaps as a prerequisite for his theory, is he not arguing from a lack of evidence? If a biologist teaches that between two existing fossils there was a non-existing third (and perhaps several others), is he not really like the man of religious faith who says: "I believe, even though there is not evidence"?⁷

5 Stephen Jay Gould, "The Return of the Hopeful Monsters," *Natural History*, vol. 86 (June/July 1977), p. 24.

6 Stephen Jay Gould, "Evolution's Erratic Pace," *Natural History*, vol. 86 (May 1977), p. 14.

7 Larry Azar, "Biologists, Help!" *Bioscience*, vol. 28 (November 1978), p. 714.

Two hundred years of systematic fossil collecting, with billions of fossils now known, yet all the supposed evolutionary links are still missing links! The laws of science demonstrate that evolution is impossible, and the fossil record demonstrates that it never occurred even if it *were* possible. Evolution is nothing but a naive and credulous religious faith in the omnipotence of matter — a faith exercised blindly, in spite of the universal evidence against it.

Despite the lack of transitional forms, however, and in spite of the strong arguments by Gould and others for a punctuationist theory of evolution, there are still a number of leading evolutionists who cling to the gradualistic, or neo-Darwinian, school of thought. One of the key scientists defending this supposedly orthodox evolutionary viewpoint is England's Richard Dawkins, who presents that faith as follows:

Darwin's own bulldog, Huxley, as Eldredge reminds us again, warned him against his insistent gradualism, but Darwin had good reason. His theory was largely aimed at replacing creationism as an explanation of how living complexity could arise out of simplicity. Complexity cannot spring up in a single stroke of chance: that would be like hitting upon a combination number that opens a bank vault. But a whole series of tiny chance steps, if non-randomly selected, can build up almost limitless complexity of adaptation. It is as though the vault's door were to open another chink every time the number on the dials moved a little closer to the winning number. Gradualness is of the essence. In the context of the fight against creationism, gradualism is more or less synonymous with evolution itself. If you throw out gradualism, you throw out the very thing that makes evolution more plausible than creation.⁸

Although Dawkins is an atheist and also a bitter foe of creationism, we creationists would certainly have to agree with his critique of punctuationism and its implied concession to creationism. If evolution by gradual accumulation of favorable chance mutations seems highly unlikely, evolution by quantum leaps seems *altogether impossible*, except by special creation at each jump.

In fact, many observers have viewed the heated arguments between the gradual evolutionists and the punctuational evolutionists in terms more of politics than of science. Those advocating "evolution by revolution" are

8 Richard Dawkins, "What Was All the Fuss About?" *Nature*, vol. 316 (August 22, 1985), p. 683.

aligned with Marxism and communism, whereas those promoting gradual evolution with its survival-of-the-fittest implications tend to be aligned (at least in the minds of their opponents) with 19th-century social Darwinism, including racism, laissez-faire capitalism, and possibly even fascism.

Michael Ruse, the Canadian Darwinist philosopher, and Edward Wilson, the Harvard sociobiologist, have been (with Dawkins and others) leaders on the neo-Darwinist side. A detailed review of this conflict and its background was recently published in *Isis*, the history of science journal.

Ruse (along with others among Gould's critics) has no hesitation in assigning Gould's advocacy of punctuated equilibria theory and the support it has received in large part to politics, both internal and external to science. He identifies an internal struggle among paleontologists and other evolutionists, especially geneticists, for cognitive standing in evolutionary theorizing. . . . Gould's advocacy of punctuated equilibria theory, Ruse claims, is connected with its congruency with the Marxist ideology of dialectical materialism.⁹

Be that as it may, the punctuationists do have one strong evidence in their favor, namely, the gaps in the fossil record. That is why most paleontologists today seem to favor the punctuated-equilibrium concept. They are well aware that the gaps are real, not just an artifact of the incompleteness of the fossil record, as the gradualists still assume.

There are too many places where the fossil record is complete enough that we ought to see transitions occurring. Even in these cases we see very few good examples of higher taxa evolving by gradual change.¹⁰

Very few, indeed! He should have said, "no examples."

Evolution happens rapidly in small, localized populations, so we're not likely to see it in the fossil record.¹¹

Stanley goes on to refute the best example that others have cited of such gradual change: namely, the fossil horses of the Tertiary. If *that*

9 Eveleen Richards, "A Political Anatomy of Monsters, Hopeful and Otherwise," *Isis*, vol. 85 (September 1994), p. 379.

10 Steven Stanley, "Resetting the Evolutionary Timetable," Interview by Neil A. Campbell, *Bioscience*, vol. 36 (December 1986), p. 725.

11 Ibid.

example is invalid, we can be confident that there are *none* that are valid. Evolutionists would certainly use any that *were*.

Eldredge and Gould, by contrast, decided to take the record at face value. On this view, there is little evidence of modification between species, or of forms intermediate between species, because neither generally occurred. A species forms and evolves almost instantaneously (on the geological time scale) and then remains virtually unchanged until it disappears, yielding its habitat to a new species.¹²

Evolutionary Stagnation

It is interesting to observe the great emphasis that Gould and his colleagues are now placing on what they call “stasis.” As we have noted, this seems a strange way to prove evolution. A species that is not changing is surely not evolving into something else. It seems that the main purpose of this emphasis on “evolutionary stagnation” is as an argument against their gradualist opponents, but stasis surely doesn’t contribute much to evolution! On the other hand, it strongly supports a prediction from the creation model: namely, the conservation of the various types once they have been created.

But note what Gould and Eldredge say about stasis in relation to their own theory of evolution:

Stasis, as palpable and observable in virtually all cases (whereas punctuations are usually, but not always, elusive) becomes the major empirical ground for studying punctuated equilibrium. . . . Although punctuated equilibrium deals directly only with stability of species through time, the higher-level analogue of non-trending in higher clades has also graduated from an undefined non-subject to a phenomenon worth documenting.¹³

Gould’s unique style of gloating comes to the surface in a review article published in his monthly column in *Natural History*.

Stasis is now generally recognized as an intriguing puzzle by evolutionists. No definitive resolution is in sight, but

12 Peter J. Smith, “Evolution’s Most Worrisome Questions,” *New Scientist*, vol. 116 (November 19, 1987), p. 59.

13 Stephen J. Gould and Niles Eldredge, “Punctuated Equilibrium Comes to Age,” *Nature*, vol. 366 (November 18, 1993), p. 223.

geneticists and embryologists have offered their counsel, and I am tickled that our much maligned profession (dull, descriptive paleontology) has provided such a puzzle to kings of the theoretical mountain.¹⁴

The concept of stasis interrupted at rare intervals by evolutionary jumps, also, in the thinking of Gould and his associates, does away with the idea that evolution implies progress. It is all just a matter of chance, chaotic shuffling, and contingency:

Nonetheless, contemporary science has massively substituted notions of indeterminacy, historical contingency, chaos and punctuation for previous convictions about gradual, progressive, predictable, determinism.¹⁵

Note Gould's implicit and self-serving assumption that his personal views constitute "contemporary science."

Assisted by Elizabeth Vrba, Gould also attempts to explain presumed evolutionary progress by invoking a mysterious "hierarchy" concept, a *deus ex machina* obviously designed to salvage his dubious evolutionary faith.

The concept of progress has been particularly vexatious throughout the history of evolutionary biology. . . . Hierarchy may resolve the issue by explaining life's weak and impersistent vector of progress as the result of deeper structural principles more inclusive than natural selection. . . . Although we can as yet only see "through a glass darkly" into the working of genes and the lives of species in macroevolution, we already glimpse enough to know that the expanded hierarchy is a reality.¹⁶

Exactly how such a "hierarchy" of "sorting and selection" might be invoked to explain "life's weak vector of progress" is suggested here by Niles Eldredge:

But if species do not change much in the course of their existence, how then do we explain large-scale, long-term change in evolution? . . . Perhaps trends are best explained by a net production or survival of species that have a feature

14 Stephen Jay Gould, "Opus 200," *Natural History* (August 1991), p. 16.

15 Gould and Eldredge, "Punctuated Equilibrium Comes to Age," p. 227.

16 Elizabeth Vrba and Stephen J. Gould, "The Hierarchical Expansion of Sorting and Selection," *Paleobiology*, vol. 2 (Spring 1986), p. 226.

(such as large brains) towards one end of the spectrum of variation among a series of closely related species. There may be a higher-order culling device — analogous to natural selection but operating at a higher level — that underlies much of the macroevolutionary patterns seen in the history of life.¹⁷

Well, yes, “perhaps” . . . “there may be” some such way of “explaining” how evolution might have happened, even if all the hard evidence goes against it. One should remember, though, that the actual “patterns seen in the history of life” are precisely predictable from the creation model.

On the other hand, one must also remember that evolution by jumps is not based on evidence, but on lack of evidence!

Gould and Eldredge (1977) contend that: “Phyletic gradualism was an *a priori* assertion from the start — it was never ‘seen’ in the rocks . . .” (p. 115). By the same token . . . punctuated equilibrium . . . is not based on empirical evidence but on the apparent lack of evidence — gaps in the fossil record.¹⁸

The Need for Extinctions

Another important cog in the punctuational model is that of extinction. The idea is that a long-stationary population must become extinct before a new type can expand and take over the vacated ecological niche. This is presumably a part of the “chaos” that Gould would invoke to generate new organisms. His colleague, Eldredge, also favors extinctions, as does Peter Smith:

Extinctions disrupt eco-systems and reset the evolutionary clock: significant amounts of evolutionary change are positively correlated with episodes of ecological recovery following extinction.¹⁹

Using examples from throughout the fossil record, both marine and continental, Eldredge thus demonstrates

17 Niles Eldredge, “Progress in Evolution?” *New Scientist*, vol. 110 (June 5, 1986), p. 57.

18 Brian J. Alters and William F. McComas, “Punctuated Equilibrium: the Missing Link in American Education,” *American Biology Teacher*, vol. 56 (September 1994), p. 337.

19 Eldredge, “Progress in Evolution?” p. 57.

convincingly that extinction is the motor of species evolution, and that without it, there could be no development.²⁰

Isn't evolution marvelous? The way it happens is for species not to change for a long, long time, and then suddenly to become extinct so that a new species can appear and be preserved by an unidentified culling device higher than natural selection.

One would think that, with such explanations, it would be evolutionism itself that would become extinct! However, real evolutionists are committed religiously to evolutionism, and they will continue to believe in it, or at least to promulgate it, no matter what the evidence shows against it.

It is worth noting in passing that, if "extinction is the motor of evolution," as Eldredge says, and if speciation takes place rapidly, as Gould and Stanley maintain, then we ought to be observing many species evolving today. Norman Myers, an ecologist especially concerned with preserving the environment, often points out the frequency of extinctions.

We are surely losing one or more species a day right now out of the five million (minimum figure) on earth.²¹

There have, of course, been many extinctions during acknowledged human history, a history that is more or less equated by evolutionists with the Pleistocene and recent epochs. One thinks of the mastodon, saber-tooth tiger, cave bear, moa, aurochs, etc. If we are losing one species a day, that would suggest that well over a million species have become extinct during human history! Such extinctions are supposed to be evolution's "motor," but not one *new* species is documented in all human history. It seems that, if the motor is running, it's running backwards.

Presumably, evolution occurs while we are not watching. Evolutionists used to tell us that we could not see it because it goes too slow. Now, it turns out that we cannot see it because it goes too fast:

If in a given time interval, there are dramatically new forms appearing — new genera, for example — and at the same time the species are quite stable, then we must conclude that . . . the origin of new genera must come via rapid branching events. Maybe in some cases an entirely new genus forms via one event or in some cases by way of three or four events.²²

20 Smith, "Evolution's Most Worrisome Questions," p. 59.

21 Norman Myers, "The End of the Lines," *Natural History*, vol. 94 (February 1985), p. 2.

22 Stanley, "Resetting the Evolutionary Timetable," p. 724.

There are even larger gaps to account for, of course, at the family level and higher. Evolutionists are generally quite silent on *that* problem.

The bottom line, of course, is that there is no real scientific evidence that evolution has ever occurred at all, either gradualistically or punctuationally, in past or present. Two eminent evolutionary geologists, though still committed firmly to evolutionism, have made the following cogent observation:

We conclude that the probability that species selection is a general solution to the origin of higher taxa is not great, and that neither of the contending theories of evolutionary change at the species level, phyletic gradualism or punctuated equilibrium, seem applicable to the origin of new body plans.²³

A creationist could not have said it better!

Living Fossils

The punctuationists have laid great stress on the phenomenon of stasis, but they have really only scratched the surface. The basic types of living plants and animals have actually been in a period of practical stasis ever since they first appeared in the fossil record. Many types have existed unchanged throughout the whole geologic column, and the geological ages that it is supposed to represent. Others have deteriorated and/or become extinct, but none have ever evolved into higher types, so far as the record shows.

Not infrequently, some certain animal that was supposed to have become extinct in a previous geological “age” will turn up still alive and well in the present world. Even though no fossils of the organism had been found in strata from the intervening ages, it was surely alive during those ages, and so it is now recognized as a “living fossil.”

Many of these living fossils have been identified, and more keep turning up all the time. One of the most famous of the living fossils has been the coelacanth fish, which supposedly became extinct in the Cretaceous period about 70 million years ago, but which suddenly turned up still alive and well in the Indian Ocean near Madagascar.

Other such publicized living fossils include the Metasequoia dawn redwood tree (previously thought to be extinct since the Miocene epoch, 20 million years ago), the tuatara, or beakhead reptile (supposedly extinct

23 James W. Valentine and Douglas H. Erwin, “Interpreting Great Developmental Experiments: The Fossil Record,” in *Development as an Evolutionary Process* (Alan R. Lias, Inc., 1987), p. 96.

since the Cretaceous), the segmented mollusk *Neopilina* (extinct, it was thought, since the Devonian, 300 million years ago), and the brachiopod shellfish *Lingula* (presumed extinct for about 400 million years, since the Ordovician).

Recently, a key “index fossil” from the Ordovician period has been identified as still living.

All paleontologists dream of finding a “living fossil.” Noel Dilly, it seems, has done so and an account of the discovery appears in a recent issue of the *Journal of Zoology*. A trawl from deep water off New Caledonia, half way between Brisbane and Fiji, has brought to light an extant pterobranch (a colony forming hemichordate) that has an astonishing physical resemblance to graptolites, a group considered to have been extinct since the Carboniferous, 300 million years ago. . . . graptolites are arguably the most important zone fossils of the lower Paleozoic (570–360 million years before present).²⁴

A “zone fossil,” or “index fossil,” is one that is believed to be so identified with a specific geologic “age,” that its presence in a rock is generally believed to date the rock. Graptolites have long been used to date Ordovician rocks, but now it seems that they must also have been present *in all the other* “ages.” The same is true of a number of the other “living fossils.”

As a matter of fact, the very term is misleading, since most other living plants and animals also have fossil representatives. In that sense they are *all* living fossils.

As noted before, even many of the one-celled creatures of the Precambrian are still living today:

Both blue-green algae and bacteria fossils dating back 3.4 billion years have been found in rocks from South Africa. . . . Even more intriguing, the pleurocapsalean algae turned out to be almost identical to modern pleurocapsalean algae at the family and possibly even at the generic level.²⁵

24 Sue Rigby, “Graptolites Come to Life,” *Nature*, vol. 362 (March 18, 1993), p. 209.

25 “Ancient Alga Fossil Most Complex Yet,” *Science News*, vol. 108 (September 20, 1975), p. 181. See also “Static Evolution,” *Science News*, vol. 145 (March 12, 1994), p. 168–169.

This is typical of many bacteria-fossil finds. Precambrian rocks have also yielded fossils of modern soil bacteria, as well as the very common modern *E-coli* cells, and various others.

This is truly the “age of bacteria.” . . . The number of *Escherichia coli* cells in the gut of each human being exceeds the number of humans that has ever lived on this planet.²⁶

Gould is here making the point that in all the assumed four-billion-year history of life, the bacteria have been the most successful survivors in the struggle for existence, and they have changed hardly at all in four billion years.

The same principle is found among the marine invertebrates of the Paleozoic. No one yet has found a living trilobite, but stay tuned! Many of the other ancient invertebrates are still alive.

Nearly all living phyla of marine invertebrates that have reasonably good fossil records have first occurrences either in the late Precambrian or early to middle Cambrian. At the class level there are 27 paleontologically important living groups and all have documented occurrences which are Silurian or older.²⁷

Now Professor David Raup of the University of Chicago and the Field Museum of Natural History is one of the nation’s leading paleontologists. He goes on to point out that the same phenomena are found among the vertebrates and the land plants. He also says:

Experience has shown that as more fossils are discovered, the first occurrences of major groups tend to be pushed back in time.²⁸

Stephen Gould makes the following significant observation:

The order of life and the persistence of nearly all basic anatomical designs throughout the entire geological history of multicellular animals record the intricacy and resistance to change of complex development programs.²⁹

26 Stephen Jay Gould, “The Evolution of Life on Earth,” *Scientific American*, vol. 271 (October 1994), p. 87.

27 David M. Raup, “On the Early Origins of Major Biologic Groups,” *Paleobiology*, vol. 9, no. 2 (1983), p. 107.

28 Ibid., p. 113.

29 Stephen Jay Gould, “Through a Lens, Darkly,” *Natural History* (September 1989), p. 24.

Undoubtedly, more living fossils among the many phyla of the marine invertebrates will come to light with further marine exploration.

Scientists searching the South Pacific ocean beds have found living prehistoric creatures, thought to have died out 66 million years ago. Dr. Dennis Gordon, a marine scientist in Wellington, New Zealand, said that “live fossils” — sponges, sea snails, lace corals and sea lilies — were found by French researchers in 1985, but the nature of their discoveries was not realized until last week. Dr. Gordon then identified the first of the lace corals as a variety believed to have been made extinct when dinosaurs were wiped out 66 million years ago.³⁰

Although all rocks so far identified as Cambrian have been identified as marine deposits, and the same is true of most of the Ordovician, it is notable that land plants and animals have been found in every “age” from late Ordovician and early Silurian onwards.

It was not until the Silurian period, 400 to 450 million years ago, that plants and some animals adapted to a land environment and became well established there.³¹

Paleobotanical studies have indicated that terrestrial floras became established between late Ordovician and mid-Silurian times. The presence of predatory arthropods on land in the late Silurian supports the idea that the main components of terrestrial ecosystems were in place substantially earlier.³²

Not surprisingly, no transitional forms have been found between the marine plants and the terrestrial plants.

We still lack any precise information concerning the presumed aquatic ancestors from which land plants evolved, and the search for evidence of these precursors continues.³³

The same absence of transitions applies to the land invertebrates.

30 See London *Daily Telegraph*, News section (December 8, 1989).

31 Patricia G. Gensel and Henry N. Andrews, “The Evolution of Early Land Plants,” *American Scientist*, vol. 75 (September/October 1987), p. 478.

32 Andrew J. Jeram, Paul A. Selden and Dianne Edwards, “Land Animals in the Silurian: Arachnids and Myriapods from Shropshire England,” *Science*, vol. 250 (November 2, 1990), p. 660.

33 Gensel and Andrews, “Evolution of Early Land Plants,” p. 481.

The basal Pridoli arthropods described here now constitute the earliest known terrestrial fauna. Moreover, like the Devonian faunas, this assemblage is dominated by predators, suggesting that the arthropod occupiers of lower trophic layers remain to be discovered.³⁴

Now consider also the remarkable case of the insects. Once again there are no transitional forms leading up to them.

We are in the dark concerning the origin of insects.³⁵

The flying insects are especially noteworthy. Their wings are not like the wings of birds, bats, or flying reptiles. Each type of wing is supposed by evolutionists to have *evolved independently* of the others. (Seriously, what are the “chances” of this?)

Insects include some of the most versatile of all flying machines . . . some insects — through a combination of low mass, sophisticated neurosensory systems and complex musculature — display astonishing aerobatic feats.³⁶

It staggers the mind how evolutionists can believe that such amazing structures could be so beautifully designed without a designer.

Houseflies, for example, can decelerate from fast flight, hover, turn in their own length, fly upside down, loop roll and land on a ceiling — all in a fraction of a second.³⁷

Insect wings are far more subtly constructed than sails and distinctly more interesting. Many, for example, have lines of flexion across the wing, as already described in the fossil cicadas. They also incorporate shock absorbers, counterweights, ripstop mechanisms, and many other simple but brilliantly effective devices, all of which increase the wing’s aerodynamic effectiveness.³⁸

They have few if any technological parallels — yet.³⁹

34 Jeram, Selden and Edwards, “Land Animals in the Silurian,” p. 660.

35 Pierre Grassé, *Evolution of Living Organisms* (New York: Academic Press, 1977), p. 30.

36 Robin J. Wootton, “The Mechanical Design of Insect Wings,” *Scientific American*, vol. 263 (November 1990), p. 114.

37 Ibid.

38 Ibid., p. 117.

39 Ibid., p. 120.

It surely would seem that such structures and mechanisms, designed far more intricately and efficiently than any structural designer or aeronautical engineer could ever hope to accomplish, clearly proclaim the existence of an intelligent Creator.

Furthermore, they are all “living fossils,” with the only changes being toward diminishing size and complexity.

Some 84 percent of the insect families alive today were alive 100 million years ago.⁴⁰

Insects are “slow to evolve,” and “even slower to go extinct.”⁴¹

Consider the remarkable bee, as an example of insect persistence.

David Grimaldi, a curator at the American Museum of Natural History, NY, reported in December that the stingless bee’s advanced features have changed little in the last 80 million years. . . . The oldest bee known before this find is 45 million years old. The stingless characteristics and other features of the fossilized bee indicate that bees are far older than 80 million years.⁴²

Insects are not easily preserved as fossils in sedimentary rocks, of course, and most of the best finds, like the bee, are found in amber. These are usually preserved in remarkable detail, however, and nearly always are found to be practically identical with their modern counterparts. This is also true of ants, cicadas, beetles, termites, and on and on.

Somewhat different types are the arachnids and multipods, but the same persistency is found in them as well.

Scientists digging in upstate New York have discovered 380 million year old fossils of a tiny land-dwelling animal called a pseudoscorpion. . . . Before the new finds, . . . the pseudoscorpion fossil record went back only 35 million years. . . . The first land animals appear in the fossil record at the end of the Silurian period . . . roughly 400 million years ago. But many of these earliest fossils, including the newly found

40 Carl Zimmer, “Insects Ascendant,” *Scientific American*, vol. 14 (November 1993), p. 30.

41 Ibid.

42 “Fossil Finds,” *Geotimes*, vol. 33 (May 1988), p. 27.

pseudoscorpions, show highly evolved features, including well-developed sensory hairs.⁴³

Many of the fossil insects — including, most notably, the cockroaches and dragon-flies, among others — are much larger than their present-day descendants, but are otherwise much the same.

Another evidence of continuity worth noting is the symbiotic relation between insects and flowering plants.

So intricate and so mutually adapted are the features of both flower and insect in many cases — special colors and odors to attract the insects, exquisitely fashioned mouth parts to extract the nectar, for example — that this pairing has become our classic example of co-evolution, or promotion of adaptation and diversity by interaction among organisms during their evolution.⁴⁴

Co-evolution, indeed! This neologistic word game merely compounds the problem of finding the eternally elusive mechanisms of evolution. Neither the plant nor its insect pollinator could have survived at all without the symbiotic relationship being in place *from the start*. These phenomena are far better evidence of creation, than of “co-evolution.”

When we consider the vertebrates (fish, amphibians, reptiles, birds, and mammals), once again we find an abundance of living fossils. Among the fish, fossil beds of sharks, herring, catfish, lungfish, and others — as well as whales, dolphins, and other marine mammals — not to mention the famous coelacanth, are abundant. The same is true of land vertebrates. A great many modern mammals seem to have considerably larger counterparts in the fossils (e.g., elephants, bears, tigers, sloths, beavers, etc.).

They are certainly similar to extant animals in the same families, at least. Of course, many animals have apparently become extinct that once were on the earth (e.g., titanotheres, pterosaurs, therapsids, etc.), but remember that *extinction is not evolution* — in fact, it is the polar opposite of evolution! In any case, most *living* land vertebrates are also found as fossils.

Of the 329 living families of terrestrial vertebrates, 261 or 79.1 percent have been found as fossils and, when birds (which

43 R. Monastersky, “Old Pseudoscorpion Has Modern Features,” *Science News*, vol. 136 (October 21, 1989), p. 263.

44 Stephen Jay Gould, “In the Mind of the Beholder,” *Natural History*, vol. 103 (February 1994), p. 18.

are poorly fossilized) are excluded, the percentage rises to 87.8 percent.⁴⁵

One might suspect that even more living plants and animals will be found in fossil form through further exploration. Also, there is the misleading and egotistic habit paleontologists have in more or less masking the true affinity of their fossil finds by giving them different names from those of their surviving relatives.

There just is no rationale, no purpose to be served in giving different names to such virtually identical creatures just because they are separated by 3 million years of time. Yet that is the natural propensity of paleontologists: collections of otherwise similar, if not completely identical, fossils tend to get different names for no reason other than their supposedly significant age differences.⁴⁶

Dinosaurs and Dragons

A possible candidate for recognition as a special type of living fossil is the great dinosaur, normally considered to have become extinct at the end of the Cretaceous period about seventy million years ago. The intriguing possibility exists, however, that the dinosaurs themselves were relegated to the distant past by the very device deplored by Dr. Eldredge: that of giving them “a different name for no reason other than their supposedly significant age difference.”

There is considerable reason to suppose that many dinosaurs were animals well known to earlier nations by the name of *dragons*. When the first dinosaur (or dragon) bones were discovered early in the 19th century, however, the living animals had evidently been extinct for several hundred years and nearly forgotten, except in ancient tales that had become almost legendary by then. These huge animals seem to have bones and teeth similar to those of iguanas and other lizards, so they were named, simply, “terrible lizards,” or *dinosaurs*, the prefix coming from the Greek *dunamis* (“power”).

But the dragons also had looked like huge lizards, and they apparently existed in great variety. Some were described as giant serpents, some were said to have powerful legs and tails, some even had wings. Some dwelt in the ocean, some in swamps, some in deserts,

45 Michael Denton, *Evolution: A Theory in Crisis* (London: Burnett Books, Ltd., 1985), p. 189.

46 Niles Eldredge, *Time Frames* (New York: Simon and Schuster, 1985), p. 21.

some in caves or other places. Their sizes also varied considerably according to the tales. Mythological embellishments apparently equipped some with more than one head, and some were said to breathe out fire.

Tales about dragons have come down from many nations all over the world, and it is simply impossible that these various peoples were all inventing the same imaginary animals. There must have been a basis of fact in their tales, and it is not surprising that such fearsome animals would have inspired stories that soon became encrusted with mythical and magical accretions.

For some strange reason, however, modern evolutionists have vigorously and emotionally resisted any suggestion that dinosaurs might have lived contemporaneously with human beings. But this idea should not be any more shocking to evolutionists than the discovery of the living coelacanth fish, which was supposed to have been extinct since the dinosaur age, or that of New Zealand's living tuatara reptile, also presumed to have died out with the dinosaurs.

In patterns analogous to the various dragon stories, dinosaur bones and footprints have also been found all over the world on every continent, even Antarctica. There are numerous accounts, even by modern sailors, of great sea serpents, that seem to correlate well with the ancient tales of ocean-dwelling dragons, and also with the fossil remains of such dinosaur-like marine reptiles as the plesiosaurs.

There is the American Indian folklore of the "thunder-bird," a huge flying creature whose description sounds like the fearsome pterosaur. Also, there are pictographs of dinosaur-like animals that have been found on canyon walls in Arizona and Utah, and on cave walls in Siberia and South Africa. There are even reports of a large, living, lake-dwelling dinosaur-like animal in an almost inaccessible swamp area in the central African rain forest, reports brought out by the pygmies and other natives of the region. And what about the Loch Ness Monster and other plesiosaur-like creatures reported in various seas and deep lakes around the world?

Much circumstantial evidence exists, therefore, that even the dinosaurs could be included among the living — or recently living — fossils. Although modern geologists dogmatically reject such a notion, many authorities on dragon lore do recognize the undeniable resemblances. The writer in a standard encyclopedia put it this way:

The belief in dragons seems to have arisen without the slightest knowledge on the part of the ancients of the

gigantic and astonishingly dragon-like extinct reptiles of past ages.⁴⁷

The dinosaurs were, thus, admittedly “astonishingly dragon-like.” Another encyclopedia also acknowledges the similarity as follows:

The dragons of legend are strangely like actual creatures that have lived in the past. They are much like the great reptiles which inhabited the earth long before man is supposed to have appeared on earth.⁴⁸

Interestingly, modern paleontologists, committed as they are to evolutionism, refuse to recognize the strong resemblance of dinosaurs to dragons, whereas specialists in myth and legend, as well as in heraldry and ancient literature, do see clearly the resemblance of dragons to dinosaurs — even though they also, for the most part, believe in evolution.

From the point of view of the creationist, of course, there is no valid reason that dinosaurs (or dragons) could not have been contemporaneous with man, just as a great number of other living fossils have been contemporaneous with man. Perhaps it is an “image” problem with evolutionists. Dinosaurs have been so glamorized as denizens of the long-ago, prehistoric past that they have almost become synonymous with evolutionism in the public mind — and evolutionists feel emotionally attached to them, afraid that if they yield on this point, the whole evolutionary structure will crumble.

At any rate, with or without dinosaurs on the list of living fossils, it seems evident that the ancient world preserved in the fossil record was much like the present world, with the same general array of plants and animals. The one difference is that the present world is “zoologically impoverished,” as an early geologist put it. There is nothing new in the present world, but the old world was vibrant with many creatures that are now gone.

Finally, it would seem that we are well justified in wondering whether these multi-billion year ages ever existed at all. Not only are most living kinds of plants and animals very little different from fossils of like kinds supposedly living millions of years ago, but it is beginning to seem that

47 Walter A. Philips, “Dragon,” Article in *Encyclopedia Britannica*, vol. 7 (1949), p. 569, 570.

48 “Dragons,” Article in *World Book Encyclopedia*, 1965 Edition.

some actual living organisms may have been alive individually through all those ages.

From bees entombed in amber for up to 40 million years, U.S. scientists have extracted bacterial spores and brought them back to life.⁴⁹

The scientists who accomplished this feat insist that “the lightly controlled conditions of isolation and growth, and the DNA analysis should convince any skeptics that the bug is genuinely ancient.”⁵⁰

The same scientists claim to have revived 135 million-year-old DNA from other insects preserved in amber. There seems no valid reason to dispute their claims, as extreme precautions were taken against contamination. However, there is surely good reason to reject the millions of years alleged. Surely no organism could ever stay “alive” that long. Possibly a few thousand years could be acceptable, but not 40 million!

49 Roger Lewin, “They Cam from 40 Million B.C.,” *New Scientist*, vol. 146 (May 27, 1995), p. 18.

50 Ibid.

Chapter 6

Evolution Is Not Even Possible

We have shown evidence in some detail, with documentation from evolutionists themselves, that no macroevolution is taking place today and that none ever occurred in the past. On the other hand, all the real scientific evidence conforms elegantly and unmistakably to natural predictions from the creation model. In this chapter we shall see that the reason *why* evolution does not happen is that it is precluded by the very laws of science.

The Law of Cause and Effect

One very fundamental law of science is the principle of cause and effect: no effect can be greater than its cause. It should be intuitively obvious to everyone that our very complex universe of stars and planets, and animals and people, must have been caused by a great First Cause capable of producing stars and planets and animals and people.

Since, however, this foundational principle leads us back naturally to an omnipotent Creator, our modern evolutionary cosmologists have tried to develop a mathematical system that can do away with the very idea of a cause for the universe. A typical statement of this remarkable and illogical conclusion is as follows:

Let me start by saying that many people believe that everything in nature has to have a causal explanation. Although this may be true at the macroscopic level, it is not necessarily the case at the microscopic level, as quantum physics has demonstrated. Transitions, decays, and nuclear reactions do

sometimes occur spontaneously without apparent cause. Similarly, the universe itself does not require a cause.¹

Modern cosmologists are mostly now advocating the big-bang theory as explaining the origin of the universe. This concept will be discussed critically in chapter 8, but one of our objections to it is that the laws of science cannot be applied to this primordial explosion. It is said to be a “singularity” in which the laws themselves were somehow originated. Therefore, causal reasoning, which is applicable everywhere in the real world of human experience, does not work here (if it were used, the whole big-bang scenario would vanish). Hence, the universe had a beginning without a cause, so say our cosmophysical philosophers:

Thus we reach a general conclusion: there is no *philosophy of big bang cosmology* that makes it reasonable to reject the fundamental thesis of *big bang cosmology*; that the universe began to exist without a cause.²

Presumably, therefore, one must choose between believing the mathematical speculations of the theoretical physicists, which seem to allow a purely accidental and causeless universe, *or else* the universally proven law of cause-and-effect, which is known to apply without exception to all phenomena and systems in the real world of experience.

If one chooses to believe the latter, then the universe must have a First Cause, and that Cause must be capable of producing all the observable “effects” in the universe. Not only has the First Cause generated the space-mass-time cosmos itself, but also all the phenomena of force, motion, and energy, as well as life, intelligence, volition, morality, beauty, and emotion. By cause-and-effect reasoning, therefore, the First Cause must be an eternal, omniscient, omnipotent, living, volitional, moral, aesthetic, emotional being!

Furthermore, there are two other basic and universal laws of science that seem to tell us that evolution is impossible. These laws make it clear why it is that no one in human history has ever observed real *macroevolution* happening in the present, and why the records of the rocks and bones show that it never happened in the past.

1 Richard A. Crowe, “Is Quantum Cosmology Science?” *Skeptical Inquirer* (March/April 1995), p. 54. Professor Crowe is chairman of the Department of Physics and Astronomy at the University of Hawaii.

2 Quentin Smith, “Did the Big Bang Have a Cause?” *British Journal of Philosophy of Science*, vol. 45 (1994), p. 666. Italics are his.

The Laws of Thermodynamics Versus Evolution

The law of increasing entropy is an impenetrable barrier that no evolutionary mechanism yet suggested has ever been able to overcome. Evolution and entropy are opposing and mutually exclusive concepts. If the entropy principle is really a universal law, then evolution *must be impossible*.

The very terms themselves express contradictory concepts. The word “evolution” is, of course, derived from a Latin word meaning “out-rolling.” The picture is of an outward-progressing spiral, an unrolling from an infinitesimal beginning through ever-broadening circles, until finally all reality is embraced within.

“Entropy,” on the other hand, means literally “in-turning.” It is derived from the two Greek words *en* (meaning “in”) and *trope* (meaning “turning”). The concept is of something spiraling inward upon itself, exactly the opposite concept to that of “evolution.” Evolution is change outward and upward; entropy is change inward and downward.

That the principles of evolution and entropy are both believed to be universal principles and yet are mutually contradictory is seen from the following authoritative definitions.

[There is a] general natural tendency of all observed systems to go from order to disorder, reflecting dissipation of energy available for future transformation — the law of increasing entropy.³

This law states that all natural processes generate entropy, a measure of disorder.⁴

Entropy, in short, is the measurement of molecular disorder. The law of the irreversible increase in entropy is a law of progressive disorganization, of the complete disappearance of the initial conditions.⁵

It can hardly be questioned that evolution is at least superficially contradicted by entropy. The obvious prediction from the evolution model that there must be a universal principle that *increases* order is

3 R. B. Lindsay, “Physics — To What Extent Is It Deterministic?” *American Scientist*, vol. 56 (Summer 1968), p. 100.

4 David Layzer, “The Arrow of Time,” *Scientific American*, vol. 223 (December 1975), p. 56. Dr. Layzer is professor of astronomy at Harvard.

5 Ilya Prigogine, “Can Thermodynamics Explain Biological Order?” *Impact of Science on Society*, vol. 23, no. 3 (1973), p. 162. Dr. Prigogine is professor in the Faculty of Sciences at the University Libre de Belgique and is one of the world’s leading thermodynamicists.

confronted by the scientific fact of a universal principle that *decreases* order. Nevertheless evolutionists retain the faith that, somehow, evolution and entropy can co-exist, even though they do not know how.

In the complex course of its evolution, life exhibits a remarkable contrast to the tendency expressed in the second law of thermodynamics. Where the second law expresses an irreversible progression toward increased entropy and disorder, life evolves continually higher levels of order. The still more remarkable fact is that this evolutionary drive to greater and greater order also is irreversible. Evolution does not go backward.⁶

Back of the spontaneous generation of life under other conditions than now obtained upon this planet, there occurred a spontaneous generation of elements of the kind that still goes on in the stars; and back of that I suppose a spontaneous generation of elementary particles under circumstances still to be fathomed, that ended in giving them the properties that alone make possible the universe we know.⁷

Life might be described as an unexpected force that somehow organizes inanimate matter into a living system that perceives, reacts to, and evolves to cope with changes to the physical environment that threatens to destroy its organization.⁸

The most comprehensive statement on evolution as a process is the classic definition of Sir Julian Huxley, as follows:

Evolution in the extended sense can be defined as a directional and essentially irreversible process occurring in time, which in its course gives rise to an increase of variety and an increasingly high level of organization in its products. Our present knowledge indeed forces us to the view that the whole of reality *is* evolution — a single process of self-transformation.⁹

6 J. H. Rush, *The Dawn of Life* (New York, NY: Signet, 1962), p. 35.

7 George Wald, "Fitness in the Universe," *Origins of Life*, vol. 5 (1974), p. 26.

8 National Aeronautics and Space Administration, *Mars and Earth*, NF-61 (Washington, DC: GPO, August 1975), p. 5.

9 Julian Huxley, "Evolution and Genetics," in *What is Man?*, ed. J. R. Newman (New York, NY: Simon and Schuster, 1955), p. 278.

Thus, in the *one* instance, “all observed systems . . . go from order to disorder”; and in the *other*, “the whole of reality . . . gives rise to an increasingly high level of organization in its products.” It seems obvious that either evolution or entropy has been vastly overrated, or else that something is wrong with the English language!

The entropy principle, however, is nothing less than the second law of thermodynamics, which is as universal and certain a law as exists in science. First, however, before discussing the second law, we should define the first law and, for that matter, thermodynamics itself.

Thermodynamics is a compound of two Greek words, *therme* (“heat”) and *dunamis* (“power”). It is the science that treats of the power of energy contained in heat, and its conversion to other forms of energy. The term “energy” is itself derived from the Greek word *energeia* (“working”), and is normally defined as “the capacity to do work.” In modern scientific terminology, “energy” and “work” are considered equivalent, each measured as the product of a force times the distance through which it acts (foot-pounds, in the English system of dimensions). Something that has “energy” has the “capacity to do work”; that is, the “capacity to exert a force through a distance.”

The concept of “power” is closely related to that of “energy,” except that the time factor must also be taken into account. Power is the work done, or the energy expended to do the work per unit of time — measured in foot-pounds per second, for example. Thus, the science of thermodynamics began as the study of the conversion of heat power into mechanical power, like the use of steam to turn the wheels and move the load. The invention of the steam engine, and the development of the theoretical equations of thermodynamics by which to design it, led to the great Industrial Revolution and our modern age of technology. The golden age of science and the greatest scientists of all — Newton, Maxwell, Kelvin, and others — produced the discipline and the laws of thermodynamics.

Not long after the discovery of the “mechanical equivalent of heat” by Joule and others, it was realized that there were also other forms of energy (electrical energy, chemical energy, light, heat, sound, etc.), and that all of them were comprehended within these same laws of thermodynamics. The advent of the atomic age made it evident that even matter itself was merely another form of energy, and that it also could be brought under the broad umbrella of thermodynamics.

Therefore, the modern scientist has come to recognize that the science of thermodynamics is exceedingly broad. It provides the basic framework for all energy-conversion processes, whereby heat, electricity, or any other

form of energy can be converted into any other form. In the 20th century, it also includes the processes of mass-energy interchanges.

Since all processes are fundamentally energy-conversion processes, and since everything that happens in the physical universe is a “process” of some kind, it is obvious why the two laws of thermodynamics are recognized as the most universal and fundamental of all scientific laws. Everything that *exists* in the universe is some form of energy, and everything that *happens* is some form of energy conversion. Thus, the laws that govern energy and energy conversion are of paramount importance in understanding the world in which we live.

It should be underlined that these laws are empirical laws. That is, like all other laws of science, they are accepted on the basis of experience and testing, not because of some deterministic mathematical proof. However, they are based on better and more varied evidence than any other scientific principle whatever!

Isaac Asimov defines the first law as follows:

To express all this, we can say: “Energy can be transferred from one place to another, or transformed from one form to another, but it can be neither created nor destroyed.” Or we can put it another way: “The total quantity of energy in the universe is constant.” When the total quantity of something does not change, we say that it is conserved. The two statements given above, then, are two ways of expressing “the law of conservation of energy.” This law is considered the most powerful and most fundamental generalization about the universe that scientists have ever been able to make.¹⁰

As long as nuclear reactions are not involved, the law of conservation of matter also applies. However, matter can be converted into energy and energy into matter, and in either case, the sum total of matter and energy remains the same. Similarly, as long as the process involves only changes in kinetic energy (that is, energy of motion), then the law of conservation of momentum applies. However, the most comprehensive of all the conservation laws is the law of conservation of mass-energy, and this is the first law of thermodynamics.

The first law is itself a strong witness against evolution, since it implies a basic condition of stability in the universe. The fundamental

¹⁰ Isaac Asimov, “In the Game of Energy and Thermodynamics You Can’t Even Break Even,” *Smithsonian Institute Journal* (June 1970), p. 6.

structure of the cosmos is one of conservation, not innovation. However, this fact in itself is not impressive to the evolutionist, as he merely assumes that the process of evolution takes place within the framework of energy conservation, never stopping to wonder how it came to pass that the total energy was constant from the beginning at the supposed big bang.

But it is the second law that wipes out the theory of evolution. There *is* a universal process of change, and it *is* a directional change, but it is *not* an upward change.

This entropy law appears in three main forms, corresponding to 1) classical thermodynamics, 2) statistical thermodynamics, and 3) informational thermodynamics. Each of these corresponds to a different, though equivalent, concept of entropy.

In so-called classical thermodynamics, the second law, like the first, is formulated in terms of energy:

It is in the transformation process that Nature appears to exact a penalty and this is where the second principle makes its appearance. For every naturally occurring transformation of energy is accompanied, somewhere, by a loss in the *availability* of energy for the future performance of work.¹¹

In this instance, entropy can be expressed mathematically in terms of the total irreversible flow of heat. It expresses quantitatively the amount of energy in an energy conversion process that becomes unavailable for further work. In order for work to be done, the available energy has to “flow” from a higher level to a lower level. When it reaches the lower level, the energy is still in existence, but no longer capable of doing work. Heat will naturally flow from a hot body to a cold body, but not from a cold body to a hot body. For this reason, no process can be 100 percent efficient, with all of the available energy converted into work. Some must be deployed to overcome friction, and will be degraded to non-recoverable heat energy, which will finally be radiated into space and dispersed. For the same reason, a self-contained perpetual motion machine is an impossibility.

Since, as we have noted, everything in the physical universe is energy in some form and, since in every process some energy becomes unavailable, it is obvious that ultimately *all* energy in the universe will be unavailable energy, if present processes go on long enough. When that

11 R. B. Lindsay, “Entropy Consumption and Values in Physical Science,” *American Scientist*, vol. 47 (September 1959), p. 378.

happens, presumably all the various forms of energy in the universe will have been gradually converted through a multiplicity of processes into uniformly (that is, randomly) dispersed heat energy. Everything will be at the same low temperature. There will be no “differential” of energy levels, and, therefore, no “gradient” of energy to induce its flow. No more work can then be done, and the universe will reach what classical physicists used to call its ultimate “heat death.”

This is a depressing outlook for the future, but it is what must come eventually, if present processes continue. The fact that the universe has not yet reached this dead condition, and, in fact, is still very much alive, with tremendous reservoirs of available energy everywhere, proves that it is *not* infinitely old. If it were of infinite antiquity, it would already be dead.

Thus, the second law proves, *as certainly as observable science can prove anything whatever*, that the universe had a beginning. Similarly, the first law shows that the universe could not have begun itself. The total quantity of energy in the universe is constant, but the quantity of *available* energy is decreasing. Therefore, as we go *backward* in time, the available energy would have been progressively greater until, finally, we would reach the beginning point, where available energy equaled total energy. Time could go back no further than this. At this point both energy and time must have come into existence. Since energy could not create itself, the most scientific and logical conclusion to which we could possibly come is that the First Cause created energy (including matter), as well as time.

The evolutionist will not accept this conclusion, however. He hypothesizes that either: (1) some natural law canceling out the second law prevailed far back in time, or (2) some natural law canceling out the second law prevails far out in space.

When he makes such assumptions, however, he is denying his own theory, which says that all things can be explained in terms of presently observable laws and processes. He is really resorting to creationism, but refusing to acknowledge a Creator.

A second way of stating the entropy law is in terms of statistical thermodynamics. It is recognized today not only that all scientific laws are empirical, but also that they are statistical. A great number of individual molecules, in a gas for example, may behave in such a way that the overall aspects of that gas produce predictable patterns in the aggregate, even though individual molecules may deviate from the norm. Laws describing such behavior must be formulated statistically, or probabilistically,

rather than strictly dynamically. The dynamical laws then can theoretically be deduced as limiting cases of the probabilistic statements.

In this context, entropy is a probability function related to the degree of disorder in a system. The more disordered (or disorganized) a system may be, the more highly entropic it is, and the more probable it is. A highly organized system, on the other hand, is highly improbable, and must be explained by something more than random processes.

All real processes go with an increase of entropy. The entropy also measures the randomness, or lack of orderliness of the system; the greater the randomness, the greater the entropy.¹²

Note again the universality expressed here: *all real processes*. Isaac Asimov defined this concept interestingly as follows:

Another way of stating the second law then is: “the universe is constantly getting more disorderly.” Viewed that way, we can see the second law all about us. We have to work hard to straighten a room, but left to itself, it becomes a mess again very quickly and very easily. Even if we never enter it, it becomes dusty and musty. How difficult to maintain houses, and machinery, and our own bodies in perfect working order; how easy to let them deteriorate. In fact, all we have to do is nothing, and everything deteriorates, collapses, breaks down, wears out, all by itself — and that is what the second law is all about.¹³

Remember that this tendency to move from order to disorder applies to all real processes. Real processes include, of course, biological and geological processes, as well as chemical and physical processes. The interesting question is this: “How does a real biological process, which goes from order to disorder, result in evolution, which goes from disorder to order?” Perhaps the evolutionists can ultimately find an answer to this question, but at least they should not ignore it, or speculate their way around it, as most evolutionists do.

Especially is such a question vital when we are thinking of evolution as a growth process on the grand scale from particles to people. This represents an absolutely *gigantic* increase in organization and complexity, and is clearly out of place altogether in the context of the second law!

12 Harold Blum, “Perspectives in Evolution,” *American Scientist* (October 1955), p. 595.

13 Asimov, “In the Game of Energy and Thermodynamics,” p. 6.

A third and still more fascinating concept of entropy comes from the field of information theory, or what may be called communicational thermodynamics. This scientific discipline is a product of the computer age and the field of cybernetics. Informational science attempts to quantify the communication of meaningful information from sender to receiver. Communications systems include books, television sets, tape recorders, computer discs, and many other devices. Even a man or woman and his or her brain can be considered as such a system.

In information theory, entropy is considered to be a measure of the degree in which information is lost or becomes garbled in the transmission process. It measures the “noise” or “static” that tends to inhibit the perfect transmission of a message. The process of communication is surprisingly analogous to a standard energy-conversion process. Just as some energy is lost in the conversion process, so always some information is lost in the communication process. No one appropriates the teacher’s complete lecture, and the recording never reproduces the orchestral rendition with perfect fidelity.

One can sense intuitively that all three concepts of entropy are similar and basically equivalent to each other. As a matter of fact, this equivalence can be demonstrated quite rigorously by mathematics, though the proof is much too complicated to try to reproduce here. The fact that entropy is really the same entity, whether defined in classical, statistical, or informational terms, is in fact one of the major discoveries of modern science.

The equivalence of entropy in the classical and statistical context is implied in the following:

Each quantity of energy has a characteristic quality called entropy associated with it. The entropy measures the degree of disorder associated with the energy. Energy must always flow in such a direction that the entropy increases.¹⁴

Similarly, the equivalence of these concepts with the informational concept is recognized:

It is certain that the conceptual connection between information and the second law of thermodynamics is now firmly established.¹⁵

¹⁴ Freeman J. Dyson, “Energy in the Universe,” *Scientific American*, vol. 224 (September 1971), p. 52.

¹⁵ Myron Tribus and Edward C. McIrvine, “Energy and Information,” *Scientific American*, vol. 224 (September 1971), p. 188.

All sorts of intriguing illustrations of these relationships may be discovered. For example, the sun's energy is converted through photosynthesis into vegetables. These are eaten by a man, whose metabolic processes convert their stored chemical energy into energy-imparting molecules transmitted through the blood stream to various parts of the body, especially the brain. The blood energizes the complex brain cells and circuitry, which then generate thought and convey information.

Isaac Asimov confirms that all these different ways of looking at the second law are really equivalent to each other.

That is one way [that is, decreasing availability of energy] of stating what is called the second law of thermodynamics. It is one of many ways; all of them are equivalent although some very sophisticated mathematics and physics are involved in showing the equivalence.¹⁶

Hence, there are three basic vehicles of physical reality associated with the entropy concept. In the structure of all systems, entropy is a measure of *disorder*. In the maintenance of all processes, entropy is a measure of *wasted energy*. In the transmission of all information, entropy is a measure of *useless noise*. Each of these three concepts is basically equivalent to the other two, even though it expresses a distinct concept.

Always, furthermore, entropy tends to increase. Everywhere in the physical universe there is an inexorable downhill trend toward ultimate complete randomness, utter meaninglessness, and absolute stillness. The evolutionary delusion becomes absolute nonsense in the context of the all-comprehensive second law.

When confronted directly with this problem (e.g., in creation/evolution debates), evolutionists often will completely ignore it. Some will honestly admit that they do not know how to resolve the problem, but will simply express confidence that there must be a way, since otherwise one would have to believe in supernatural creation. George Wald puts it this way:

In this strange paper I have ventured to suggest that natural selection of a sort has extended even beyond the elements, to determine the properties of protons and electrons. Curious as that seems, it is a possibility worth weighing

16 Asimov, "In the Game of Energy and Thermodynamics," p. 8.

against the only alternative I can imagine, Eddington's suggestion that God is a mathematical physicist.¹⁷

Some evolutionists try to solve the problem by suggesting that the entropy law is only statistical and that exceptions can occur, which would allow occasional accidental increases in order. Whether this is so, however, is entirely a matter of faith. No one has ever *seen* such an exception — and science is based upon observation!

There is thus no justification for the view, often glibly repeated, that the second law of thermodynamics is only statistically true, in the sense that microscopic violations repeatedly occur, but never violations of any serious magnitude. On the contrary, no evidence has ever been presented that the second law breaks down under any circumstances.¹⁸

It is surprising, but true, that most textbooks dealing with some aspect of organic evolution never even mention the entropy problem. In creation-evolution debates, the evolutionist debater normally will ignore it altogether.

The popular syndicated columnist, Sydney Harris, once commented on the evolution-entropy conflict as follows:

There is a factor called “entropy” in physics, indicating that the whole universe of matter is running down, and ultimately will reduce itself to uniform chaos. This follows from the second law of thermodynamics, which seems about as basic and unquestionable to modern scientific minds as any truth can be.

At the same time that this is happening on the physical level of existence, something quite different seems to be happening on the biological level: structure and species are becoming more complex, more sophisticated, more organized, with higher degrees of performance and consciousness.¹⁹

17 George Wald, “Fitness in the Universe,” *Origins of Life*, vol. 5 (1974), p. 26. Wald was a famous humanistic biologist at Harvard.

18 A. B. Pippard, *Elements of Chemical Thermodynamics for Advanced Students of Physics* (Cambridge, England: Cambridge University Press, 1966), p. 100. Pippard was professor of physics at Cambridge.

19 Sydney Harris, Field Enterprise Syndicate, *San Francisco Examiner* (January 27, 1984).

As Harris points out, the law of increasing entropy is a universal law of *decreasing* complexity, whereas evolution is supposed to be a universal law of *increasing* complexity. Creationists have been pointing out this serious contradiction for years, and it is encouraging that at least some evolutionists are beginning to be aware of this basic and irreconcilable conflict:

How can the forces of biological development and the forces of physical degeneration be operating at cross purposes? It would take, of course, a far greater mind than mine even to attempt to penetrate this riddle. I can only pose the question because it seems to me the question most worth asking and working upon with all our intellectual and scientific resources.²⁰

This, indeed, is a good question, and one for which evolutionists so far have no answer. Some have tried to imagine exceptions to the second law at some time or times in the past, which allowed evolution to proceed in spite of entropy, but such ideas are nothing but wishful thinking. Physicist Frank Greco says the following:

Being a generalization of experience, the second law could only be invalidated by an actual engine. In other words, the question, "Can the second law of thermodynamics be circumvented?" is not well-worded and could be answered only if the model incorporated every feature of the real world. But the answer can readily be given to the question, "Has the second law of thermodynamics been circumvented?" Not yet.²¹

Of course, the fact that no exception to the law of increasing entropy has ever been observed does not prove that such a thing never happened. It simply shows that such ideas are outside the scope of science. Evolutionists are free to believe in such "singularities" by faith, if they wish, but they have no right to impose them on unsuspecting young minds in the name of science.

Some evolutionists take refuge in the idea that, since the universe is almost infinitely large, and we can sample only a small part of it, we don't really know that the entropy principle always applies. However, what we *do* know is that, wherever it has been tested, it always works. Whether the second law may hold on some hypothetical planet a million light years

20 Ibid.

21 Frank Greco, *American Laboratory Practice* (October 1982), p. 88.

away has no bearing on the fact that it always holds true on *this* planet, where evolution is supposed to be happening.

The Vacuous Open-System Argument

Most knowledgeable evolutionists, however, if pushed for an answer to the entropy problem, will take refuge in the “open-system” argument. Asimov asserts that:

Life on earth has steadily grown more complex, more versatile, more elaborate, more orderly, over the billions of years of the planet’s existence. . . . How could that vast increase in order (and therefore that vast decrease in entropy) have taken place? The answer is it could *not* have taken place without a tremendous source of energy constantly bathing the earth, for it is on that energy that life subsists. . . . In the billions of years that it took for the human brain to develop, the increase in entropy that took place in the sun was far greater — far, far greater than the decrease that is represented by the evolution required to develop the human brain.²²

In other words, the earth in its geologic time setting is “open” to the sun’s energy, and it is this tremendous influx of energy that powers the evolutionary process and enables it to rise and overcome the entropy law which would otherwise inhibit it. The first and second laws of thermodynamics, evolutionists say, apply only to *isolated systems* — systems into which no external energy can flow — and so supposedly do not apply to the earth.

The evolutionist will also cite various examples of growth in open systems to illustrate his point, such as a seed growing up into a tree with many seeds. In like manner, he says, the sun supplies energy to the open earth-system throughout geologic time to keep evolution going, even though perhaps at some long-distant time the greater earth-sun system will finally die and evolution will stop.

Roger Lewin expresses this curious idea as follows:

One problem biologists have faced is the apparent contradiction by evolution of the second law of thermodynamics. Systems should decay through time, giving less, not more, order.

One legitimate response to this challenge is that life on earth is an open system with respect to energy and therefore the

22 Asimov, “In the Game of Energy and Thermodynamics,” p. 11.

process of evolution sidesteps the law's demands for increasing disorder with time.²³

It is amazing how many anti-creationist debaters and writers try to "sidestep" this serious problem with such a simplistic cliché as the above. Creationists who cite the entropy principle against the evolutionary philosophy are, time and again, dismissed as either ignorant of thermodynamics or dishonest in their use of the second law. Such charges are inappropriate, to say the least.

This open-system gambit is an exceedingly naive argument, and it indicates the desperate state of evolutionary theory that leads otherwise competent scientists to resort to it. It should be self-evident that the mere existence of an open system of some kind, with access to the sun's energy, *does not of itself generate growth*. The sun's energy may bathe the site of an automobile junk yard for a million years, but it will never cause the rusted, broken parts to grow together again into a functioning automobile.

A beaker containing a fluid mixture of hydrochloric acid, water, salt, or any other combination of chemicals may lie exposed to the sun for endless years, but the chemicals will never combine into a living bacterium or any other self-replicating organism. More likely, it would destroy any organisms that might accidentally have been caught in it. Availability of energy (by the first law of thermodynamics) has in itself no mechanism for thwarting the basic decay principle enunciated by the second law of thermodynamics. *Quantity* of energy is not the question, but *quality*!

In the first place, when evolutionists argue that the second law applies only to isolated systems (from which external sources of information and order are excluded), the argument is irrelevant, for there is no such thing as a real, isolated system. Yet entropy certainly increases in most systems. The earth and its biosphere are indeed open systems, with an ample supply of energy coming in from the sun to do the work of building up the complexity of these systems. Furthermore, evolutionists cite specific examples of systems in which the order increases — such as the growth of a crystal out of solution, the growth of a seed or embryo into an adult plant or animal, or the growth of a small Stone-Age population into a large complex technological culture — as proof that the second law does not inhibit the growth of more highly ordered systems.

Arguments and examples such as these, however, are specious! It is like arguing that, since NASA was able to put men on the moon, therefore,

23 Roger Lewin, "A Downward Slope to Greater Diversity," *Science*, vol. 217 (September 24, 1982), p. 1239.

it is reasonable to believe that cows can jump over the moon! Creationists have for many years been emphasizing that the second law really applies *only* to *open* systems, since there is no such thing as a truly isolated system. The great French scientist and mathematician, Emil Borel, has proved this fact mathematically, as acknowledged thus by Layzer:

Borel showed that no finite physical system can be considered closed.²⁴

Creationists have long acknowledged — in fact *emphasized* — that order can and does increase in certain special types of open systems, but this is no proof that order increases in *every* open system! The statement that “the earth is an open system” is a vacuous statement, containing no specific information, since all systems are open systems.

Secondly, the entropy principle applies at least as much to *open* systems as to *closed* systems. In an isolated system, shut off from external energy, the entropy (or disorganization) would certainly increase. In an open system (such as the earth receiving an influx of heat energy from the sun), the entropy always *tends to increase*, and, as a matter of fact, will *usually increase more rapidly* than if the system remained closed! An example would be a tornado sweeping through a decaying ghost town or a cast-iron wrecking ball imposed on an abandoned building. Anyone familiar with the actual equations of heat flow will know that a simple influx of heat energy into a system *increases* the entropy of that system; it does not decrease it, as evolution would demand. Opening a system to external energy does not resolve the entropy problem at all, but rather makes it worse! The author of one of the most respected and widely used textbooks on thermodynamics says:

The statement in integral form, namely that the entropy in an isolated system cannot decrease, can be replaced by its corollary in differential form, which asserts that the quantity of entropy generated locally cannot be negative irrespective of whether the system is isolated or not, and irrespective of whether the process under consideration is irreversible or not.²⁵

Thus, entropy (or disorganization) in an open system *always* at least tends to increase, no matter how much external energy may be available

²⁴ Layzer, “The Arrow of Time,” *Scientific American*, vol. 223 (December 1975), p. 65.

²⁵ Arnold Sommerfeld, *Thermodynamics and Statistical Mechanics* (Academic Press, 1956), p. 155.

to it from the sun or any other source. If this tendency is to be overcome so that order in the system might be made to increase instead (as evolution would require), then the external energy must somehow be supplied to it, not as raw energy (like a bull in a china shop), but as organizing information.

If the energy of the sun is going somehow to transform the non-living molecules of the primeval soup into intricately complex, highly organized, replicating living cells, and then to evolve populations of simple organisms, like worms, into complex, thinking human beings, then that raw energy has to be converted into these evolutionary marvels through some unknown but very complex series of codes and specifically designed mechanisms. If such codes and mechanisms are not available on the earth (and no one yet has any evidence that any such things exist at all), then the incoming heat energy from the sun will simply disintegrate any organized systems that might accidentally have shown up here.

Criteria for a Growth Process

The second law says that all processes basically must be decay processes. Apparent superficial exceptions to this rule do indeed exist, however, especially in the phenomena of life. A seed grows up into a tree, and an embryo grows up into an adult animal. Even in the non-living world, there seem to be some exceptions; for example, the formation and growth of a crystal. And, of course, there are many artificial growth processes which can be produced. Threads can be made to “grow” into a dress and bricks can be made to “grow” into a building.

It should never be forgotten, however, that all such apparent decreases of entropy can be produced only at the expense of a still greater increase of entropy in the external environment, so that the world as a whole, or the universe as a whole, continues to run down. Furthermore, such growth processes are only temporary at best. The tree and the animal eventually die, and the crystal sooner or later disintegrates. The dress wears out, and the building crumbles. “Dust to dust” is always the victor in the end.

But we still need to consider the problem of the production of even a local, temporary growth process. What criteria have to be satisfied before such a “negentropic” (or entropy-reversing) process becomes possible, and does the supposed evolutionary process meet these criteria?

A little consideration quickly makes it evident that at least *four* criteria have to be satisfied before a growth process can be initiated and maintained. The first two of these are obvious:

1. *An Open System.* Obviously, growth cannot occur in an isolated, or closed system; the second law is in fact *defined* in terms of a closed system. However, this criterion is only theoretical, because in the real world closed systems do not even exist! It is evident that the laws of thermodynamics apply to open systems as well, since they have been tested and proved only on open systems!
2. *Available Energy.* This criterion is also actually redundant, since the energy of the sun is always available, either directly or indirectly, to all systems of any kind on the entire earth.

Now, however, we come to the real heart of the problem. The evolutionist glibly gives entropy the brush-off because the earth is an open system bathed in the sun's energy. Such an answer is vacuous and trivial, for *all* systems are open to the sun's energy, but only a few exhibit a growth process, and even these only temporarily. What must be the remarkable *additional conditions* that can empower a worldwide evolutionary growth process in the whole biosphere for over four billion years?

For even the local, temporary growth systems with which men have observational acquaintance (as distinct from philosophical predilection or preference), there must be at least two additional criteria satisfied:

3. *A Coded Plan.* There must always, without known exception, exist a pre-planned program, or pattern, or template, or code, if growth is to take place. Disorder will never randomly become order. Something must sift and sort and direct the environmental energy before it can "know" how to organize the unorganized components. The fact that a "need" exists for growth to take place, is of little importance to bobbing particles.

In the case of the plant, for example, the necessary program for its growth has been written into the structure of the germ cells, including especially the *genetic code*, the amazing system of the DNA-RNA complex that somehow, by its intricately coiled template structure and "messenger" functions, directs the assimilation of the environmental chemicals into a resulting plant structure like that of its predecessor plants. A similar coding system is also present in the animal "seed."

In inorganic systems, the growth is directed by the intricate molecular structure of the crystal compound and by the chemical properties of the elements comprising it. Each crystal is directed into a predictable geometric pattern on the basis of the chemical code implicit in the periodic table of the elements and their own pre-existing structures. As a matter of fact, in the case of the crystallization process, there is an important sense in which the formation of a crystal really represents an *increase* of entropy, even in the solution from which it forms. That is, there is more “information” or “energy,” for the production of work, in the liquid solution than in the stable structure that crystallizes out of it.

Artificial processes also have their “codes.” The building is based on a blueprint, and the dress on a pattern.

But whence came these codes? How did the chemical elements acquire their orderly properties? What primeval DNA molecule had no previous DNA molecule to go by?

Our experience with artificial processes indicates that a code for growth requires an intelligent planner. An architect had to draw the blueprint, and a dress designer prepared the pattern. Could mindless, darting particles plan the systematic structure of the elements that they were to form? Even more unbelievably, could these elements later get together and program the genetic code, which could not only direct the formation of complex living systems of all kinds, but even enter into the replication process that would insure the continued production of new representatives of each kind? To imagine such marvels as this is to believe in magic — and magic without even a magician at that!

A code *always* requires an intelligent coder. A program requires a programmer. To say that the most fantastically complex and effective code of all — the genetic code — somehow coded itself in the first place is to abandon all pretense of science and reason in the study of the world as it is.

But the genetic code is utter chaos in comparison with the complexity of a program that might conceivably direct the evolutionary growth process from particles to people over five billion years of earth history! Where is the evidence for such a program? What structure does it have? How does it function, in order to direct elements into proteins, proteins into cells, cells into plants and invertebrates, fishes into birds, and monkeys into men?

The sun’s energy is there all right, and the earth is assuredly an open system, but by what marvelous automated directional system is this energy instructed how to transmute a school of jellyfish into a colony of beavers?

Does the evolutionist imagine that mutation and natural selection could really perform the function of such an unimaginably complex program? Mutation is not a code, but only a random process which, like all random processes, *generates disorder in its products*. Natural selection is not a code, but only a sort of cybernetic device that snuffs out the disorderly effects of the mutation process. Is the evolutionist really so foolish as to think that this kind of mindless interplay could produce the human brain?

But there is still another criterion that must be satisfied, even for a local temporary growth process:

4. *An Energy-Conversion Mechanism*. It is naively simplistic merely to say: "The sun's energy sustains the evolutionary process." The question is this: "*How* does the sun's energy sustain the evolutionary process?" This type of reasoning is inexcusable for scientists, because it confuses the first law of thermodynamics with the second law. There is no doubt that there is a large enough *quantity* of energy (first law) to support evolution, but there is nothing in the simple heat energy of the sun of sufficiently high *quality* (second law) to produce the infinitely ordered products of the age-long process of evolutionary growth.

One could much more reasonably assume that the sun's energy bathing the stockpiles of bricks and lumber on a construction site will, by itself, erect an apartment building, which is an infinitely simpler structural project than the supposed products of organic evolution. There is far more than enough energy reaching the building site than is necessary to build the building, so why bother to rent equipment and hire workmen? This very "reasonable" suggestion will not work, however, even if the sun's heat beams down on those materials for a billion years.

The missing ingredient is an energy-conversion mechanism! Some mechanism has to be on hand to convert the sun's energy into the mechanical energy required to erect the structure. This is *always* true, for any growth process. The natural tendency is to decay, so that for growth to take place, some very special and effective mechanism must be superimposed to convert the simple heat energy into the complex growth system.

In the case of the seed growing up into a tree, for example, the mechanism is that of photosynthesis. This is a marvelous and intricate mechanism by which the sun's radiant energy is somehow transformed into the growing plant tissue. Photosynthesis is so complex and wonderful a mechanism that scientists even yet do not fully compre-

hend it,²⁶ involving as it does a complex combination of electrochemical reactions, bacterial agencies, and other factors.

Similarly, various metabolic mechanisms convert the chemical energy stored in the plant into the mechanical and other forms of energy which the animal that eats the plant needs in his activities. The plant's energy may also eventually be converted into coal, the burning of which may drive a boiler that produces steam for a generator to make electrical energy. The latter is available at the construction site for conversion into the mechanical energy necessary for the construction equipment as it is operated by persons to build the building.

Dr. Lewis Thomas expresses this requirement in somewhat different terminology, using the concept of the "membrane," especially regarding the earth's atmosphere-biosphere complex as such a structure.

It takes a membrane to make sense out of disorder in biology. You have to be able to catch energy and hold it, storing precisely the needed amount and releasing it in measured shares. A cell does this, and so do the organelles inside. Each unit is poised in the flow of solar energy, tapping off energy from metabolic surrogates of the sun. To stay alive, you have to be able to hold out against equilibrium, maintain imbalance, bank against entropy. In our kind of world, you can only transact this business with membranes.²⁷

But what is the source of such marvelously designed systems that thus maintain life and permit its reproduction in spite of entropy? Thomas continues as follows:

You could say that the breathing of oxygen into the atmosphere was the result of evolution, or you could turn it around and say that evolution was the result of oxygen. You can have it either way.²⁸

Which is one convenient way of avoiding hard questions! Evolution must indeed be a magnificent phenomenon if it can evolve the conditions necessary for its own origin. But that is not all, for Thomas goes on with animation thus:

26 R. P. Levine, "The Mechanism of Photosynthesis," *Scientific American*, vol. 221 (December 1969), p. 58–70. Levine is professor of biology at Harvard.

27 Lewis Thomas, "The Miraculous Membrane," *Intellectual Digest*, vol. 4 (February 1974), p. 56.

28 Ibid.

It is another illustration of our fantastic luck that oxygen filters out the very bands of ultraviolet light that are most devastating to nucleic acids and proteins, while allowing full penetration of the visible light needed for photosynthesis. If it had not been for this semi-permeability, we could never have come along.²⁹

We are, indeed, very “lucky”! Had it not been for this fantastic mechanism that “accidentally” developed, the law of entropy would never have allowed living things to exist at all.

Always, therefore, one or more energy-conversion mechanisms must be available for utilization of the sun’s energy whenever there is any kind of growth process. This is in addition to the pre-programmed plan for directing the growth process that must also be available.

But the most extensive and energy-demanding growth process of all — namely, the organic evolution of the entire biosphere — has no such mechanism! Neither does it have, as we have seen, a program. How, then, can it possibly work?

The evolutionists’ answer, of course, is *mutation and natural selection*. However, neither of these constitutes a coded plan. Likewise, neither of them is an energy-conversion mechanism. If neither is either, how can both be both?

A mutation is a random change in an already ordered code, and natural selection is a sort of sieve which screens out these mutants and, thereby, preserves this previous order. Neither one has the potential to convert the sun’s energy (or any other kind of energy) into some other form of energy that will generate new and higher order in the species. The theory of evolution, therefore, must be suspended in an evidential vacuum, with no visible mechanism of support. It flatly contradicts the universal second law of thermodynamics, and it fails completely to meet the necessary criteria for even those superficial exceptions to the law that occur in living organisms. Evolutionists, therefore, walk by faith, not by sight!

The second law of thermodynamics could well be stated as follows: “In any ordered system, open or closed, there exists a *tendency* for that system to decay to a state of disorder, which tendency can be suspended or reversed only by an external source of ordering energy directed by an informational program, and transformed through an ingestion-storage-

29 Lewis Thomas, “The Miraculous Membrane,” *Intellectual Digest*, vol. 4 (February 1974), p. 56.

converter mechanism into the specific work required to build up the complex structure of that system.”

If either the information program or the converter mechanism is not available to that “open” system, it will *not* increase in order, no matter how much external energy surrounds it, or flows into it or through it. The system will inevitably proceed to decay in accordance with the second law of thermodynamics.

To cite special cases (such as the seed, for which the genetic code and the conversion mechanism of photosynthesis *are* available) is futile as far as “evolution” is concerned, since there is neither a directing program nor conversion apparatus available to produce an imaginary evolutionary growth-in-complexity of the earth and its biosphere.

It is even more futile to refer to inorganic processes such as crystallization as evidence of evolution. Even Prigogine recognizes this as follows:

The point is that in a non-isolated system there exists a possibility for formation of ordered, low-entropy structures at sufficiently low temperatures. This ordering principle is responsible for the appearance of ordered structures such as crystals as well as for the phenomena of phase transitions.

Unfortunately this principle cannot explain the formation of biological structures. The probability that at ordinary temperatures a macroscopic number of molecules is assembled to give rise to the highly ordered structures and to the coordinated functions characterizing living organisms is vanishingly small. The idea of spontaneous genesis of life in its present form is therefore highly improbable, even on the scale of the billions of years during which pre-biotic evolution occurred.³⁰

Another scientist has also pointed out the fallacy in comparing crystallization to evolution:

Attempts to relate the idea of “order” in a crystal with biological organization or specificity must be regarded as a play on words which cannot stand careful scrutiny.³¹

30 Ilya Prigogine, Gregoire Nicolis and Agnes Babloyants, “Thermodynamics of Evolution,” *Physics Today*, vol. 25 (November 1972), p. 23.

31 Hubert P. Yockey, “A Calculation of the Probability of Spontaneous Biogenesis by Information Theory,” *Journal of Theoretical Biology*, vol. 67 (1977), p. 380.

Therefore, the highly specialized conditions that enable crystals to form, and plants and animals to grow have nothing whatever to do with evolution. These special conditions themselves (that is, the marvelous process of photosynthesis, the complex information programs in the living cell, and even the electrochemical properties of the molecules in the crystal, etc.) could never arise by chance: their own complexity could never have been produced within the constraints imposed by the second law. But without these conditions, the crystal would not form, and the seed would never grow.

But what is the information code that tells primeval random particles how to organize themselves into stars and planets, and what is the conversion mechanism that transforms amoebas into men? These are questions that are not answered by a superficial, specious reference to the earth as an open system! And until they *are* answered, the second law makes evolution appear wholly impossible.

To their credit, there are a few evolutionists (though apparently *very* few) who recognize the critical nature of this problem and are trying to solve it. Prigogine has proposed an involved theory of “order through fluctuations” and “dissipative structures.”³² We shall look at this work in somewhat more detail later.

But his examples are from inorganic systems, and he acknowledges that there is a long way to go to explain how these become *living* systems by his theory.

But let us have no illusions — our research would still leave us quite unable to grasp the extreme complexity of the simplest of organisms.³³

Another writer who has partially recognized the seriousness of this problem is Charles J. Smith.

The thermodynamicist immediately clarifies the latter question by pointing out that the second law classically refers to isolated systems which exchange neither energy nor matter with the environment; biological systems are open and enhance both energy and matter. . . . This explanation, however, is not completely satisfying, because it still leaves open the problem of how or why the ordering process has arisen (an apparent lower-

32 Prigogine, Nicolis, and Babloyants, “Thermodynamics of Evolution,” p. 23–28.

33 Ilya Prigogine, “Can Thermodynamics Explain Biological Order?” *Impact of Science on Society*, vol. 23, no. 3 (1973), p. 178.

ing of the entropy), and a number of scientists have wrestled with this issue. Bertalanffy (1968) called the relation between irreversible thermodynamics and information theory one of the most fundamental unsolved problems in biology. I would go further and include the problem of meaning and value.³⁴

Whether rank-and-file evolutionists know it or not, the problem that they have with entropy is “*one of the most fundamental unsolved problems in biology.*” In fact, it is more than a problem: it is a devastating denial of the evolution model itself! It will continue to be so until evolutionists can demonstrate that the vast imagined evolutionary continuum in space and time has both a *program* to guide it, and an *energy converter* to empower it. Otherwise, the second law precludes it.

Although it is really inconceivable, just suppose that evolutionists might eventually manage to formulate a plausible code and mechanism to explain how both entropy and evolution could co-exist. Even if they could, however, the evolution model would still not be as good as the creation model. At the most, such a suggestion would only constitute an imaginary modification of the basic evolution model. The latter could certainly never *predict* the second law!

The evolution model thus cannot even explain the second law, but the creation model *predicts* it! The creationist is not embarrassed or perplexed by entropy, since it is exactly what he expects. The creation model postulates a perfect creation of all things completed during a period of special creation in the beginning. From this model, the creationist naturally predicts *limited horizontal* changes within the created entities (e.g., variations within biologic types, enabling them to adapt to environmental changes).

If “vertical” changes occur, however, from one level of order to another, they would have to go in a downward direction, toward lower order. The Creator, both omniscient and omnipotent, made all things perfect in the beginning. No process of evolutionary change could improve them, but deteriorative changes could disorder them.

Not only does the creation model predict the entropy principle, but the entropy principle directly points to creation. That is, if all things are now running down to disorder, they must originally have been in a state of high order. Since there is no naturalistic process that could produce such an initial condition, its cause must have been supernatural. The only

34 Charles J. Smith, “Problems with Entropy in Biology,” *Biosystems*, vol. 1 (1975), p. 259.

adequate cause of the initial order and complexity of the universe must have been an omniscient programmer, and the cause of its boundless power an omnipotent energizer. The second law of thermodynamics, with its principle of increasing entropy, both repudiates the evolution model, and strongly confirms the creation model.

Order through Chaos and Dissipation

Evolutionists hardly even considered this problem until recent years, let alone solved it. There are, to their credit, a few theorists who have at least recognized the problem and offered certain speculations as to possible directions in which to search for a solution. The one man whose speculations have received the most attention (even helping to acquire for him a Nobel Prize in 1977) is Belgian physicist Ilya Prigogine, who advanced the strange idea of “dissipative structures” as a possible source of new complexity in nature.

He postulated that when systems somehow are “perturbed” to a “far-from-equilibrium” condition, as a result of a large influx of external energy that produces an inordinate amount of internal-energy dissipation, then certain “structures” might be generated. An example would be the generation of storm cells in the earth’s atmosphere by incoming solar heat.

How such “dissipative structures” could possibly produce organic evolution is completely unknown, of course, and seems quite impossible to imagine. Such systems in no way contradict the principle of entropy but rather are illustrations of entropy, working overtime! A Harvard scientist, John Ross, comments on the invulnerability of the second law thus:

There are no known violations of the second law of thermodynamics. Ordinarily the second law is stated for isolated systems, but the second law applies equally well to open systems. . . . There is somehow associated with the field of far from equilibrium phenomena the notion that the second law of thermodynamics fails for such systems. It is important to make sure that this error does not perpetuate itself.³⁵

Nevertheless, the extraordinary notion of generating organization through chaos has achieved a remarkably numerous following in recent years, not only among evolutionists anxious for any solution to the entropy problem, but also among radicals desiring a scientific justification

³⁵ John Ross, letter to the editor, *Chemical and Engineering News* (July 7, 1980), p. 40.

for social revolutions, as discussed in Volume 3 of this Trilogy. For example, UNESCO scientist Ervin Laszlo, has said the following (as quoted by Wil Lepkowski):

What I see Prigogine doing is giving legitimization to the process of evolution — self-organization under conditions of change. . . . Its analogy to social systems and evolution should be very fruitful.³⁶

There is little need for extended discussion here of the many speculative applications that have been related to Prigogine's suggestion since he "gave legitimization to evolution," as Laszlo put it (thus admitting by inference that evolution was illegitimate until Prigogine came along with this unique "remedy" for entropy).

One must give Prigogine credit at least for trying to resolve this intractable problem. Here is what Prigogine and his followers have claimed:

Our scientific heritage includes two basic questions to which until now no answer was provided. One is the relation between disorder and order. The famous law of increase of entropy describes the world as evolving from order to disorder; still biological or social evolution shows us the complex emerging from the simple.³⁷

But Prigogine never even considers whether evolutionists have really *shown* this, or merely *believe* it! Prigogine noted that, in a field with a high flow-through of energy, resulting in much energy dissipation (or "chaos"), certain ephemeral structures tend to appear for a time (e.g., vortices in a turbulent flow wake behind a bridge pier, hurricane or tornado cells in the atmosphere, small whirls in a cup of hot coffee), and he thought that these "dissipative structures" might somehow support the idea of order out of chaos, or the evolution of the biosphere. He acknowledged that this question of how evolution could occur in a world governed by the entropy law had, indeed, been a vexing question, even though most biologists have ignored it.

There is another question, which has plagued us for more than a century: What significance does the evolution of a living

36 Wil Lepkowski, "The Social Thermodynamics of Ilya Prigogine," *Chemical and Engineering News* (April 16, 1979), p. 30.

37 Ilya Prigogine and Isabelle Stengers, *Order Out of Chaos* (New York, NY: Bantam Books, 1984), p. xxix.

being have in the world described by thermodynamics, a world of ever-increasing disorder?³⁸

Prigogine then argues that the problem is essentially solved through his dissipative structures, since they constitute a sort of order generated in a chaotic milieu:

We now know that far from equilibrium, new types of structures may originate spontaneously. In far-from-equilibrium conditions, we may have transformation from disorder, from thermal chaos, into order. New dynamic states of matter may originate, states that reflect the interaction of a given system with its surroundings. We have called these new structures dissipative structures to emphasize the constructive role of dissipative processes in their formation.³⁹

Just how excessive “dissipation” can be “constructive” remains a mystery. No real evidence is ever given that these “new structures” are stable and, therefore, able to serve as a future base for still higher degrees of order, such as any evolutionary process would require. In the real world, any “structures” so generated seem always to disappear quickly.

For example, large vortices generated in a turbulent wake behind an obstruction in a stream are very soon broken up into smaller and smaller vortices farther downstream, and their energy is quickly dissipated through friction, and lost to any further utility. One of the present writers (H. Morris) did his Ph.D. dissertation on such dissipation of energy structures more than 45 years ago,⁴⁰ and this was certainly the result in water flows at least. An old poetic cliché among hydraulicians goes something like this: “Big whirls make little whirls that feed on their velocity; little whirls make tiny whirls, and so on to viscosity.”

Nevertheless, although he still expresses some hesitation, Prigogine seems confident that he really has hit on the key to the puzzle.

We come to one of our main conclusions: At all levels, be it the level of macroscopic physics, the level of fluctuations, or the microscopic level, *non-equilibrium is the source of order. Non-equilibrium brings “order out of chaos.”* But as we have

38 Ilya Prigogine and Isabelle Stengers, *Order Out of Chaos* (New York, NY: Bantam Books, 1984), p. 129.

39 Ibid., p. 12.

40 Henry M. Morris, *A New Concept of Flow in Rough Conduits* (Minneapolis, MN: University of Minnesota, 1950), 151 p.

already mentioned, the concept of order (or disorder) is more complex than was thought.⁴¹

Especially would this difficulty become a problem with respect to how to preserve and use this “order” that emerges out of chaos. It is significant that Prigogine’s studies were all mathematical and philosophical, not experimental. He can present no real observational *proof* that the generation of fluctuations, or perturbations, or far-from-equilibrium conditions, or dissipative structures, or whatever terms he may use to describe chaos, will ever enable evolution to overcome entropy.

Among the very few evolutionists who have seriously tried to work out a harmony between evolution and entropy, not simply dismissing the issue with an irrelevant “open-system” cop-out, probably the most ambitious were D. R. Brooks and E. O. Wiley, who wrote a book several years ago actually attempting to *equate* evolution and entropy! Unfortunately, they relied heavily on Prigogine’s analysis.

Our theory suggests that evolution is a phenomenon involving systems (species) far from equilibrium. The hierarchy results from speciation, which we will try to show exhibits dynamics *analogous* to “ordering through fluctuations” (Prigogine, Nicholis, and Babloyantz, 1972). It is important to understand that this is an analogy. Ordering through fluctuations in strictly thermodynamic systems is a direct by-product of energy flows. Ordering through fluctuations in evolution is a direct by-product of information and cohesion and not, we submit, energy flows.⁴²

Building a theory on an analogy with another very dubious theory in a different field would not seem to bear great promise, but Brooks and Wiley attempt it anyway. Here is their reasoning:

Why is there order and not chaos in the living world? Because living systems, organisms and species, are individualized dissipative structures (1) exhibiting finite information and cohesion, (2) maintaining themselves through irreversible dissipation of matter and energy, and (3) existing in an open energy system.⁴³

41 Prigogine and Stengers, *Order Out of Chaos*, p. 286. Emphasis is theirs.

42 Daniel R. Brooks and Edward O. Wiley, *Evolution as Entropy* (Chicago, IL: University of Chicago Press, 1985), p. 43. Emphasis is theirs.

43 Ibid., p. 70.

Whereas this statement may be meaningful in explaining how an organism maintains itself as an orderly system, it says nothing about how the species became thus organized in the first place.

While the structural complexity of living organisms as little violates the second law of thermodynamics (or any other law of physics) as does that of a television set or a jet engine, we need to look elsewhere for a detailed understanding of the origin of this complexity during development and evolution.⁴⁴

There is probably nothing wrong with calling living organisms “dissipative structures,” if such a term is deemed useful for some reason. They are, indeed, extremely complex structures; they are certainly “open systems”; and they do dissipate much matter and energy irreversibly as they maintain their structure. Like Prigogine’s vortices, however, they eventually are dissipated themselves. As individuals they finally die; as species they may atrophy and become extinct. But, as we have seen in earlier chapters, they never evolve into some more complex species. Here, Brooks and Wiley must continue to rely on mutations, but, as Charlesworth says, they provide no evidence that mutations ever accomplish evolution!

There is nothing in evolutionary or developmental biology that justifies their assumptions that a successful mutation (which seems merely to mean a selectively neutral one in their model) is always associated with an increase in some global measure of phenotype. Nor is there anything to support the assumption that new species arise as the result of single gene mutations and are initially genetically uniform. If these assumptions are removed, the whole edifice collapses.⁴⁵

Although Brooks and Wiley call their book *Evolution as Entropy*, they don’t quite mean that. They realize that entropy will eventually win out in the end:

Evolution is a process that slows down the entropy decay of lineages, minimizing their entropy increases. This suggests

44 Brian Charlesworth, “Entropy: The Great Illusion,” Review of *Evolution as Entropy*, by Brooks and Wiley (Chicago, IL, 1985), appearing in *Evolution*, vol. 40, no. 4 (1986), p. 880.

45 Ibid.

that, as the interplay of information and cohesion, biological evolution should exhibit an intrinsic tendency toward efficiency or parsimony, which in turn should relate to the principle of minimum entropy production.⁴⁶

Perhaps, in the terminology of Gould and Eldredge, dissipative-structure theory might explain why such long periods of stasis precede extinction, but there still is no explanation of how the *chaos of extinction* will generate the *higher complexity* required by vertical evolution.

Another reviewer compliments their intentions, but remains unsatisfied by their concept:

I was disappointed by Brooks and Wiley's discussion of entropy and evolution because it did not seem to me that they present a theory at all. It is not that their theory is wrong; it seems to be vacuous instead.⁴⁷

Brooks and Wiley have not produced a new evolutionary theory, or even a very useful re-description of existing theories, but I cannot fault them for trying. They see the importance of the task, and here they are right and my fellow population geneticists are both wrong and wrongheaded.⁴⁸

At least Brooks and Wiley realize that they cannot eliminate the entropy problem by the trivial and irrelevant open-system argument to which most biologists and other evolutionists resort. Their courage in attempting to harmonize evolution with entropy is perhaps commendable, but their task is impossible! The law of entropy makes evolution impossible, and there is really no way around it, except to assume that the entropy law somehow was suspended while evolution was occurring.

They also admit that, as with other suggested evolutionary mechanisms, Prigogine's approach may be able to "retrodict" evolutionary events with just-so-stories, but it cannot *predict* any.

These states are historically emergent and can be discerned retrospectively, but cannot be predicted from initial conditions.⁴⁹

46 Brooks and Wiley, *Evolution as Entropy*, p. 74.

47 Joseph Felsenstein, "Waiting for Post-Neo-Darwin," *Evolution*, vol. 40, no. 4 (1986), p. 887.

48 *Ibid.*, p. 888.

49 Brooks and Wiley, *Evolution as Entropy*, p. 72.

Even Prigogine has expressed doubts about their analysis, though he still believes that his own approach does, somehow, hold the key to evolution.

“I see how you can do this with molecules,” he told Brooks, “but I don’t see how you can do it with species. I don’t understand the extrapolation.”⁵⁰

In short, despite all the acclaim that Prigogine has received for his work (even getting the Nobel Prize for it!), he really contributed nothing to resolving the basic conflict of evolution with the second law of thermodynamics. And, despite their noble attempt to extrapolate Prigogine’s analysis by analogy, into a harmony of entropy and evolutionary biology, neither do Brooks and Wiley. Charlesworth summarizes their failure thus:

Their work suffers, however, from the usual faults of half-baked theorizing in biology. The worst of these is the lack of any convincing derivation of the supposed laws of change from known principles, in contrast to the program of statistical mechanics which provides the background for their ideas.⁵¹

To our knowledge, the work of Prigogine plus that of Brooks and Wiley represent the most serious and extensive attempts to correlate entropy and evolution. Their efforts failed.

Nevertheless, many other writers, and evolutionists in general, continue blithely along on the assumption that the second law of thermodynamics poses no problem for evolution! Typically, they smugly accuse creationists of ignorance of thermodynamics for even thinking that this is an issue. Usually they shrug it off with a nonchalant reference to closed and open systems, or else a with patronizing mini-lecture on Prigogine and his “illumination” of how it all works.

Then there are the “new-age” evolutionists, who place even more reliance on Prigogine and his revelation of “order through chaos,” as well as on Gould and his “punctuated equilibria,” maintaining that certain mysterious forces in the cosmos, or even the conscious cosmos itself, intermittently brings higher orders, out of lower orders through traumatic episodes of catastrophe and extinction, followed by spurts of creative integration or something.

50 Cited by Roger Lewin, “A Downward Slope to Greater Diversity,” *Science* (1982), p. 1239. Lewin himself called their speculations mere “heuristic formulations.”

51 Charlesworth, “Entropy, the Great Illusion,” p. 879.

All such evolutionary notions, if scrutinized seriously, fail when they confront the mountain of hard scientific data — in fact, *all real factual data* — verifying the universal control of the laws of thermodynamics over all natural processes. No matter what sort of semantic circumlocution is formulated to get around it, the fact is that evolution is *supposed to be* a universal law that generates greater organization and complexity, whereas the second law of thermodynamics is *known to be* a universal law that tends to produce lower organization and complexity. Each is presented as a universal law of change — one of *upward* change, the other of *downward* change.

How, if language has any logic, could both be valid? The second law is known to be valid in all real processes, with no known exception, whenever those processes are observable and measurable. Evolution, on the other hand, has never been observed to occur in the present, and, to all appearances in the fossil record, never occurred in the past! It seems that if one wants to be *scientific* in choosing which to believe, he should go with the *law* that fits all the scientific evidence, and therefore he should repudiate all faith in the *theory* of evolution.

Now, despite the fact that neither Prigogine nor anyone else has solved the irreconcilable problem between evolution and entropy, many evolutionists are blithely assuming today — as did Brooks and Wiley — that Prigogine *has* solved it with his “dissipative structures,” and much of the new theories about “order out of chaos” are built on this assumption. Carl Sagan, for example, in a recent book refers indirectly to Prigogine when he says:

We repeatedly discover that natural processes — collisional selection of worlds, say, or natural selection of gene pools, or even the convection pattern in a pot of boiling water — can extract order out of chaos, and deceive us into deducing purpose where there is none.⁵²

Even more recently, a review article by a professor of the philosophy of science at Tel Aviv University in Israel has summarized all these notions and insists that a law of total evolution (particles to people) should be built up on the assumed “equivalence” of evolutionary progress with the principles of thermodynamics.

The recently suggested re-formulation of Darwinian evolutionary theory, based on the thermodynamics of self-organizing

52 Carl Sagan, *A Pale Blue Dot* (New York, NY: Random House, 1993), p. 57.

processes, has strong philosophical implications. My claim is that the main philosophic merit of the thermodynamic approach . . . is its insistence on the law-governed continuous nature of evolution.⁵³

All these anomalous concepts do, indeed, have “strong philosophical implications,” but their scientific foundation is based strictly on wishful thinking, not evidence.

The Ubiquitous Entropy Principle

As a sort of appendix to the foregoing discussion, it is instructive to note the universality of the entropy principle. Many other illustrations of the decay principle abound throughout the world of nature and of life. A few of these are mentioned briefly below:

1. *Frictional resistance to motion.* Everything happening in our space-time universe involves motion, and every motion requires a force to initiate it against inertia and sustain it against the retarding force of friction. There is always some friction resisting the movement, and some of the energy maintaining it must be used to overcome the friction, being converted thereby into non-recoverable heat energy. Thus all processes tend eventually to slow down and cease. Perpetual motion is impossible, and no process can be operated at 100 percent efficiency.
2. *Aging and death of individuals.* Individual organisms of all kinds eventually die, no matter how much energy may be available to them in the environment. Body cells deteriorate, complex protein molecules break down into simpler compounds, and eventually some vital organ or process ceases to function and death ensues. The causes of the aging process are not yet well understood, but there seems no basic reason why it could not be slowed down considerably, with resulting increased longevity. The second law does not specify the rate, but only the fact, of decay.
3. *Decay and extinction of species.* Just as individuals die, so do species. The real testimony of the fossil record is not the slow development of species, but rather the sudden extinction of species. Similarly, there may be such things as *vestigial* organs in both extinct and living kinds of animals, but no one is able to

53 Iris Frey, “Evolution in Thermodynamic Perspective: A Historical and Philosophical Angle,” *Zygon*, vol. 30 (June 1995), p. 227.

point to any *nascent* (that is, beginning to evolve into something useful) organs.

4. *Wear.* Another result of friction is that of wear. Not only does friction convert useful energy into useless heat, but also useful material into dust.

The inexorable loss of material from surfaces in sliding contact eventually destroys the usefulness of most things.⁵⁴

5. *Disease.* Both plants and animals are subject to still another kind of deterioration, namely, disease.

Long before man began to evolve about one million years ago, the earth was inhabited at least half a billion years ago by numerous other animals: the fishes, the reptiles, and eventually the mammals, many of which are now extinct. These prehistoric animals, scientists say, often were afflicted with disease.⁵⁵

6. *Decay of environment.* Not only do both individual organisms and even entire species decay and die, but also the very environment of life tends to decay. People have become especially aware of this factor in connection with pollutional problems in recent years, but actually the environment is continually decaying even apart from man-made pollution. Soil erosion, for example, continually contributes to stream and ocean dissolved chemicals, quite independently of the artificial contamination thereof. Climatic factors are constantly changing also.
7. *Decay of nations, cultures, and languages.* Although it might be difficult to demonstrate a formal connection with thermodynamics, there is a marked analogy between the birth, growth, and death of an individual, and the rise and fall of nations and cultures. Languages also typically become decadent and simple (losing complexity) in their old age.
8. *Breakdown of morals and religion.* Similarly, societies commonly experience a period of strong religious faith and strict moral

54 Ernest Rabinowicz, "Wear," *Scientific American*, vol. 206 (February 1962), p. 127.

55 James A. Tobey, "Disease is Older than Man," *Science Digest* (April 1958), p. 53.

standards in the early days of their development, only to be gradually affected by an apparently inevitable decline in faith and morals as they become older.

9. *Personal disintegration.* Finally, a universal fact of experience is that one's moral behavior is under constant pressure to drop down to lower levels. If one simply "lets himself go," he inevitably goes down, degenerates, morally and spiritually. He does not automatically get better.

In summary of this chapter, it seems that, if science proves anything at all, biological evolution has not only *never* occurred in the past or present, but also will *never occur* at all in the future. In fact, evolution is against the law: the law of ever-increasing entropy!

However, there are two other vital components of evolutionary theory that have not been discussed in this chapter because we wish to treat them each in a separate chapter of their own. One is that of non-biological, or inorganic evolution, the origin of matter and of the physical universe. The other is the evolution of inorganic materials into replicating chemicals, or the origin of life.

Both of these are also negated by the second law of thermodynamics, as well as by all other scientific evidence, as we shall see in the next two chapters.

Chapter 7

The Probability of Life Is Zero

We have been discussing the general subject of the origin of the various species of plants and animals, and have shown that the creation model of origins fits the actual scientific data (from genetics, paleontology, thermodynamics, etc.) far better than the evolution model. As predicted from the creation model, there is *no* evidence at all that the transmutation of any species into a more complex species has ever occurred in the past, is occurring now, or could ever occur in the future.

We have not yet considered, however, the origin of the very first species: the species from which, according to the evolution model, all other species have developed by natural processes. Did the very first one-celled organism evolve naturalistically from non-living chemical molecules, or was life created supernaturally? Even if the first form of life was simply a replicating protein molecule or something of the sort, could *this* somehow have developed by chance, even from complex organic chemicals?

Creationists would answer “no,” of course; life, even at the very simplest imaginary level, could never have arisen by any random, unguided combination of non-living substances. Most evolutionists, however, are “total” evolutionists. They argue that it is not scientific to allow a Creator to interfere anywhere in the processes of nature, and this includes the beginning of life:

This survival-of-the-fittest scenario takes place even at the level of molecules. On primordial earth, chemicals with slight individual variations must have replicated themselves and

competed with one another, scientists believe. The successful ones gave rise to the complex biological molecules that serve living organisms today.¹

Most evolutionists believe this, but they do so by blind faith! This process is not occurring today, and it seems altogether impossible to understand how it could ever have happened in the past. One of the world's leading evolutionary biochemists, a man who has written extensively on this difficult subject, recognizes this fact as follows:

It is extremely improbable that proteins and nucleic acids, both of which are structurally complex, arose spontaneously in the same place at the same time. Yet it also seems impossible to have one without the other. And so, at first glance, one might have to conclude that life could never, in fact, have originated by chemical means.²

Nevertheless, the author of this very sensible conclusion still believes in "abiogenesis," the origin of life by natural evolutionary processes without benefit of a Creator. In the past, Dr. Orgel has proposed that life on earth came through seeding by aliens from some distant planet, "directed panspermia." More recently, he has tried to develop the idea that it arose through the prior evolution of "pre-biotic RNA." Both ideas are born of desperation, are incapable of proof, and are merely illustrative of the deep dedication of many scientists to the religion of atheism.

The Probability Barrier

Before discussing the various ideas and experiments that have been devoted to this elusive search, it would be well to look at the overwhelming odds against its success. With no intelligence to direct the assembly of elementary particles into complex chemicals or to guide the transformation of such chemicals into chemical substances able to reproduce themselves, we must rely strictly on chance to do it all. What is the chance, or probability, that such particles could somehow evolve themselves into replicating systems?

Many evolutionary scientists have analyzed this very concept in terms of the laws of probability, hoping to show that chance processes, if operating long enough, can accidentally, as it were, generate systems that

1 Karen A. Schmidt, "Evolution in a Test Tube," *Science News*, vol. 144 (August 7, 1993), p. 90.

2 Leslie E. Orgel, "The Origin of Life on the Earth," *Scientific American*, vol. 271 (October 1994), p. 78.

might appear to have been the product of intelligent design. This is the thesis, for example, of Richard Dawkin's famous and very influential book, *The Blind Watchmaker*.

The argument from design has always been considered a most powerful evidence for the existence of God. A watch requires a watchmaker; then, what about the far more intricate and precise atomic and sidereal clocks? A water-supply system requires the efforts of a great many skilled engineers and builders; then, what about the marvelous reservoir, pumping, purification, and distribution system involved in the hydrologic cycle, which supplies water to the earth's inhabitants? A great building presupposes a trained architect; but the infinitely more complex structure of the human body cannot even be analyzed, let alone designed, by man. The greatest digital computers are absurdly simple in comparison to the complex circuitry of the human brain and nervous system.

The idea that a complex structure or system can somehow be formed by chance is a persistent delusion accepted by evolutionists. Typical naturalistic reasoning supposes that anything can happen if enough time is available. Monkeys pawing away blindly at typewriter keys are bound eventually to hit on Shakespeare's *Hamlet*, so the thinking goes.

But this idea is preposterous! To illustrate, consider an ordered structure of, say, 200 parts. This is not a large number; the very simplest one-celled organism, for example, contains more than 200 separate inter-related components, all aligned together into a perfectly integrated functioning whole. There are innumerable systems in the world far more complicated than this.

Consider the possible number of different ways 200 parts could be aligned together. A system of one part could be lined up in only one way; one of two parts could be lined up in two ways (1×2); one of three parts in six ways ($1 \times 2 \times 3$); one of four parts in 24 ways ($1 \times 2 \times 3 \times 4$); and so on. Thus, a system of 200 parts could be aligned in a stupendous number of different ways, equal to $1 \times 2 \times 3 \times 4 \times 5 \times 6 \dots \times 200$. This number is called "200 factorial" and is written "200!"

Now that is a tremendously large number. It can be shown to be approximately 10^{375} , that is, a number written as "one" followed by 375 "zeros." Therefore, the *correct* alignment of the 200 parts has only one chance out of 10^{375} of being selected on the first trial.

Suppose a new trial can be made every second. In all of the supposed astronomic time (say, 20 billion years), there have only been 10^{18} seconds, so the chance that the correct alignment might be obtained once in the

10 billion years would be only one out of $10^{(375-18)}$, or 1 in 10^{337} . This is still practically zero!

Suppose that we try to improve the chances by arranging to have a large number of sets of the 200 parts, all being tried simultaneously. Suppose that each part is only the size of an electron, which is essentially the smallest particle definitely known to exist in the universe. Then, let us fill the entire universe (of radius, say, 5 billion light-years) with solidly packed sets of electrons. It can be shown that the whole universe could only contain, at the most, 10^{130} such sets of 200 solidly packed electrons. Therefore, we now are trying to visualize 10^{130} sets of 200 parts each, and trying to arrange *only one* set into the correct alignment by chance, just *once* in twenty billion years, anywhere in the universe.

Suppose also that we invent a machine capable of making not one trial per second, but a billion-billion different trials every second, on every one of the 10^{130} sets. Surely, this is the maximum number of possible trials that anyone could possibly conceive as ever being made on this type of situation. This would permit a total of $(10^{130})(10^{18})(10^{18})$, or 10^{166} , trials to be made.

Still, after all this, the chance that one of these 10^{166} trials would give the right result and make the system work is only one out of $10^{(375-166)}$, or 1 in 10^{209} . In other words, the idea that a system of 200 parts could be arranged by *chance* into the correct order is *absolutely absurd*!

Most systems, of course, including all living organisms, are far more complex than a mere 200 parts. The cerebral cortex in the human brain, for example, contains over 10 billion cells, all arranged in proper order, and each of these cells is itself infinitely complex!

The obvious conclusion is that complex, ordered structures of any kind (and the world is full of them) simply *could never have happened by chance*. Disorder never spontaneously turns into order. Organization requires an organizer. The infinite array of complex effects seen in the universe *must* have been produced by an adequate cause. An adequate cause is God, the Creator, and nothing less!

The modern Darwinian evolutionist thinks that he has a naturalistic explanation for all this, of course. The magic formula that transforms electrons into living cells, and frogs into princes, is “random mutation and natural selection,” and the magic wand that makes it work is “billions of years.” For example, leading geneticist Francisco J. Ayala has insisted on this perspective as follows:

Darwin substituted a scientific teleology for a theological one. The teleology of nature could now be explained, at least

in principle, as the result of natural laws manifested in natural processes, without recourse to an external Creator or to spiritual or non-material forces.³

As we have seen, however, Darwinism is not really a “scientific teleology” at all. Random mutations necessarily generate disorder, not order, and natural selection at best constitutes a screening mechanism for sieving out the disorganized misfits produced by mutational pressures, and, therewith, a means for conserving the original complex systems already present. Furthermore, the longer the period of time available for such pressures to operate, the more likely it is that they will tend to overcome the selection process and drag the entire biosphere downhill to lower levels of order!

The tenet of neo-Darwinism — that random mutation combined with natural selection eliminates the need for God — is premature, to say the least. It has been shown that complex ordered structures could never be produced by “random selection” of their parts. Nevertheless, evolutionists insist that “selection” can somehow affect the “random” nature of the process. Even though genetic mutation is a random process, they feel that natural selection can so efficiently strain out the “good” mutations that its randomness is gradually converted into increased order, even without an intelligent organizer to control it.

But this is asking far too much of such an impersonal, unintelligent, static phenomenon as natural selection. At the very best, natural selection cannot produce the mutations; it does not energize or organize anything itself. All it can do is “decide” whether a combination of parts presented to it by the *random* mutation process is more ordered or less ordered than its non-mutated predecessor combination; and we have already seen that a *random* process could never produce an ordered structure for selection to “select” — even such a relatively simple structure as one containing only 200 components.

At this point, the evolutionist might object that he is being misunderstood. He does not propose that an ordered structure should be suddenly organized from its 200 separate parts all simultaneously. Rather, the process works gradually, part upon part, slowly, over long ages. Only one part is added at a time. However, a little consideration will show that this only makes matters worse! The same selection process has to take place over and over again, and each time against greater odds than the time before.

3 Francisco J. Ayala, “Teleological Explanations in Evolutionary Biology,” *Philosophy of Science*, vol. 37 (March 1970), p. 2.

That is, when the structure advances from one to two parts, it has two “choices” as to alignment, and therefore a 1 in 2 chance of success. When it goes from two to three parts, it has six choices, and therefore a 1 in 6 chance, and so on. If it goes all the way to 200 parts, its final advance has, as calculated earlier, only a 1 in 10^{375} chance. Each step in the chain has to keep “trying” until it hits on the right combination at each step before it can go on to the next one.

Therefore, the probability of developing an ordered structure of 200 parts, using this step-by-step mutation-selection technique, is only about 1 out of the number represented by the series $2! + 3! + 4! + \dots + 199! + 200!$ This number is obviously far larger than an all-at-once selection. The evolutionist should have left well enough alone!

Now, admittedly, the above analysis assumes that each successive step must, in effect, “start from scratch,” and this isn’t really fair. The evolutionist does not visualize all parts being completely reshuffled at each step. On the other hand, it must also be remembered that in every living organized system there is an intricate inter-dependence of all parts upon each other. The elevation of an n^{th} -degree ordered system to an $(n + 1)^{\text{th}}$ degree ordered system is certainly far more involved than a mere linking of the new part on to the previous structure unchanged.

And there is also the question of where the new part comes from in the first place! A mutation may cause a change in an *existing* part, but how does it create a *new* part to add to the system? Furthermore, if there is to be a change, what is to prevent the system from going downhill to less order, instead of uphill to higher order?

As a matter of fact, if mutations constitute the mechanism for producing this supposed increasing complexity, it is far more likely that the system will become *less ordered* with each change in order, instead of *more ordered*. All evolutionary geneticists agree that the great majority of mutations (if not all) are harmful.

However, let us give the evolutionary process the maximum possible benefit of the doubt and assume that each successive step has a 50:50 chance of success. That is, for a given structure, the probability that the next change will be an *addition of order* is assumed to be exactly the same as that it will be a *decrease of order*. The probability of success at each step is 1 out of 2.

There are 200 steps, of course, to be made to arrive at an integrated 200-component system. If any *one* of these steps fails (that is, produces a “lethal” or otherwise “harmful” mutation), then, of course, the evolutionary process in that particular system either stops altogether or goes backward.

All 200 steps must succeed, and the probability of success at each step is $1/2$. Elementary statistical theory shows that the probability of success of the whole chain of steps is the product of the probabilities for each step. That is, the probability that a 200-step evolutionary chain can succeed is only one out of $(1/2)^{200}$, or 1 in 2^{200} , even assuming that beneficial mutations are as frequent as harmful mutations.

This number is equal to one represented by 1 with 60 zeros, or 10^{60} , or a quadrillion quadrillion quadrillion quadrillion. Not a very likely sequence!

Therefore, even this very simple evolutionary sequence of 200 steps is for all practical purposes impossible. An ordered system, by any means mathematically conceivable, *can never* arise by a random process from non-ordered components, even if a screening mechanism such as natural selection is available to conserve its acceptable products.

The evolutionist may still offer one faint objection, saying that even though one given system has only a 1 in 10^{60} chance of evolutionary success, there must be at least *some* systems in the world that make the grade.

So, let's go this one more mile with him. The surface area of the earth contains about 5.5×10^{15} sq. ft. Assume that each part of our hypothetical system is actually a living cell, and the entire surface of the earth is covered with living cells stacked one foot deep. Assuming there are about 10^{13} cells per cubic foot of living substance, there would be about 10^{13} cells then piled on top of each square foot, and the earth's surface would hold about 5.5×10^{28} such cells. If all of these are operative in this evolutionary process simultaneously, there would be, therefore, about systems of 200 parts each available on the entire earth. Since each of them has one chance in 10^{60} of evolutionary success, the chance that one out of all the 2.8×10^{26} sets would succeed is thereby reduced to about 1 in 10^{34} . This is still an impossibly large number!

However, as each set fails, then let a fresh set come in and try again. Suppose that each step takes one-half second, so that the 200 steps in each set would take 100 seconds. Then, in the 10^{18} seconds of astronomic time, each of the sets could have 10^{16} tries. Thus, a total of 2.8×10^{42} attempts could be made in all time, in all the world, to evolve a structure of 200 parts. The probability that one of them would ever succeed anywhere is still only 1 in 10^{18} , or one chance out of a billion billion.

And this is only one very simple structure! The world is full of vast numbers of far more complicated structures and systems than this.

We conclude that evolution by any kind of chance process, even with natural selection operating, is *mathematical* and *scientific nonsense*.

The argument from design, therefore, has not at all been refuted by natural selection theory, but is actually stronger than ever. The innumerable and marvelous structures and systems of the cosmos, and their intricate adaptations to each other constitute a vast complex of intelligible order for which creative forethought and design can be the only rational explanation. It is pointless to give examples because literally every system of any kind in the whole cosmos is itself a prodigious model of intricate structure and complex planning.

The great Designer who created this wonderful world can be none other than an omnipotent, omnipresent, omniscient, holy — yet also personal, loving, and gracious Creator. The Cause of all the phenomena of the universe must encompass at least all their own characteristics.

Zero Probability

As another example, consider a series of ten flash cards, numbered from one to ten. If these are thoroughly and randomly mixed, and then laid out successively in a linear array upon the table, it would be extremely unlikely that the numbers would fall out in order from one to ten. Actually, there are 3,628,800 different ways in which these numbers could be arranged, so that the “probability” of this particular ordered arrangement (one to ten) is only one in 3,628,800. (This number is “ten factorial,” written as $10!$, calculated simply by multiplying together all the numbers from one to ten.)

Obviously, the probability of such a numerically ordered arrangement decreases rapidly as the number of components increases. For any linear system of 100 components in specified order, the probability is one in $100!$, or one chance in 10^{158} (a number represented by “one followed by 158 zeroes”).

A system requiring such a high degree of order could never happen by chance. This follows from the fact that probability theory applies only to systems with a finite possibility of occurring at least once in the universe, and it would be inconceivable that 10^{158} different trials could ever be made in our entire space-time universe.

Astrophysicists estimate that there are no more than 10^{80} infinitesimal “particles” in the universe, and that the age of the universe in its present form is no greater than 10^{18} seconds (30 billion years). Assuming that each particle can participate in a thousand billion (10^{12}) different events every second (this is impossibly high, of course), then the greatest number of events that could ever happen (or trials that could ever be made) *in all the universe throughout its entire history* is only $10^{80} \times 10^{18} \times 10^{12}$, or 10^{110} (most mathematicians/astrophysicists would make this

figure much lower, about 10^{50}). Any event with a probability significantly lower than one chance in 10^{110} , therefore, cannot occur. Its probability becomes zero, at least in our known universe.

This conclusion is intuitively obvious, but it has also been demonstrated mathematically by a great French mathematician, Emil Borel, who called it “the sole law of chance,” the law that is the basis of all other laws of probability. A French scientist, drawing on Borel’s work, has defined this law as follows:

A phenomenon whose probability is sufficiently weak — that is, below a certain threshold — will never occur, “never” meaning here within the limits of space and time at our disposal, that is to say within the limits within which it is possible to repeat the trials, for as long as a world, all of whose known dimensions are finite, allows.⁴

It should be observed, also, that we have been considering only the probability of a certain arrangement of a very specialized class of events: that is, the ordered linear alignment of 100 pre-specified components. There are also, of course, an unending series of altogether different other classes of events that might occur in space and time, each of which could be specified and studied probabilistically.

All events of all categories and arrangements must be counted among the 10^{110} possible events. To say that a certain event in one given class of events has a probability in that class of only one in 10^{110} is to say that its probability is still *infinitely lower* when innumerable other classes of events also have to be crowded into the available space and time.

Therefore, the above-suggested ordered arrangement of 100 components has a zero probability. It could *never* happen by chance. Since every single living cell is infinitely more complex and ordered than this, it is impossible that even the simplest form of life could ever have originated by chance. Even the simplest conceivable replicating protein molecule that could be imagined has been shown by Golay⁵ to have a probability of one in 10^{450} . Salisbury⁶ calculates the probability of a typical DNA chain to be one in 10^{600} .

4 Georges Sautet, *Evolution in the Light of Modern Biology*, reviewed by Louis Lafont in *Permanences*, vol. 94 (November 1972). trans. Geoffrey Lawman, in *Approaches Supplement*, p. 7.

5 Marcel Golay, “Reflections of a Communications Engineer,” *Analytical Chemistry*, vol. 33 (June 1961), p. 23.

6 Frank B. Salisbury, “Doubts about the Modern Synthetic Theory of Evolution,” *American Biology Teacher* (September 1971), p. 336.

The Improbability of Any Kind of Order

However, when creationists use this evidence from probability while lecturing or debating on the creation/evolution question, evolutionists often dismiss the evidence as irrelevant, using the clever and confusing argument that no arrangement is more or less probable than any other arrangement, and *some* arrangement *must* exist!

For example, suppose the ten flash cards showed up as follows:

Figure 1

(a)

This arrangement obviously is *unordered* in comparison with the *ordered* arrangement below:

(b)

Nevertheless, the evolutionist will say that the unordered arrangement has the same probability (one in 3,628,800, or 10!) as the ordered arrangement. Consequently, since some arrangement is necessary, and any arrangement is just as probable as any other, there is no reason to see any particular significance in the arrangement that happens to occur. Hence, any argument for design based on probability, says the evolutionist, is meaningless.

Superficially, this assertion may seem logical, even though we immediately sense that something is wrong with it. We know intuitively, as well as experimentally, that *ordered* arrangements are much less probable than *unordered* arrangements. Random arrangements of boulders on a hillside, for example, are “natural,” whereas the same boulders arranged in a circle would require explanation.

Closer consideration, of course, does quickly reveal that such evolutionary reasoning is specious. If arrangement (a) had, for some reason, been specified before hand, then its actual occurrence in the shuffle would indeed have been surprising. It could then no longer be considered an unordered arrangement, since it had been “ordered” externally! But it was *not* specified ahead of time — it was just the “luck of the draw.” Arrangement (b), however, has intrinsic order, and its actual occurrence, therefore, would almost certainly not have been by chance.

This type of evolutionary equivocation appears in various guises. One debater responded to the creationist's probability argument by calling attention to the particular combination of people in the audience. With all the persons in the state, he noted, the probability that this specific group, rather than some other group, would come together by chance was extremely small, yet there they were! The answer, of course, was that the group had not come together by chance at all: each person had come by direct intent. Nor had the individuals in the group been pre-specified, as would have been the case in a designed system, where each component had to occupy a specific position in order for the system to function.

Occasionally, the objection is a little more subtle. The fact that a certain ordered structure, functioning in a specific way, seems to have an infinitesimal probability of origin by chance is side-stepped by asserting that if some other chance assemblage had come together, it may have functioned in some other way. Evolution might then have taken a different direction. The present functioning system, it is argued, is merely the natural development from the components that happened to come together, and this is no less probable than any other assemblage that might have evolved differently.

But this tenuous argument implicitly assumes that *any* chance aggregation of particles will contain some amount of "information" and, therefore, will have some kind of evolutionary potential. Such a belief is gratuitous and naive, to say the least, when all *real* experience indicates the exact opposite! That is, it is far easier and more common to generate something disordered and useless, than something organized and functioning.

One cannot simply pull a working system out of a hat full of random particles. The system must possess the requisite "information" before it can get anywhere or do anything constructive. It must be organized in some kind of pattern, and patterns do not usually appear spontaneously. They are not inevitable, as the above evolutionary argument implies, but *extremely rare*.

For example, although one could arrange the ten flash cards in a number of possible "ordered" patterns, the number is quite limited. There seems to be a certain amount of "information" in each of the arrangements shown below (See Figure 2), but it is obvious that arrangements (b) and (c) are more "ordered," containing more information than any of the others. Arrangement (a), as noted earlier, contains *no* real order or information: it is strictly "random." No doubt a few other arrangements could be devised with a small amount of order to them, but only a few.

Figure 2

To be generous, however, let us assume that as many as 100 patterns could be devised for the ten cards that would contain some modicum of order. Each of these would have some amount of “information” and, therefore, might theoretically be able to specify some sort of wobbly function. This is entirely speculative, of course, since the only one that is *known* to be functional is the ideal pattern, as defined in arrangement (b).

Even at best, however, there would be only 100 possible functional arrangements, leaving 3,628,700 completely unordered, and, therefore, non-functional arrangements, a ratio of over 36,000 to one. That is, the odds are at least 36,000 to one against any random assemblage of ten components in a meaningful system, one that could possibly serve as a base or pattern for anything.

This simple examination merely confirms what is intuitively obvious anyhow, namely, that disorder in a system is tremendously more probable

than *any kind* of order in that system — not only one specific pattern, but *any* kind of pattern! Furthermore, this improbability increases as the number of components in the system increases.

Number of Components	Number of Arrangements			Ratio of Disordered to Ordered Arrangements
	Possible	Ordered	Disordered	
2	2	2	0	0
3	6	2	4	2:1
4	24	6	18	3:1
5	120	10	110	11:1
10	3,628,800	100	3,628,700	36,287:1

The number of ordered arrangements shown in the table is somewhat arbitrary, of course, but certainly generous. In any event, it is very clear that the probability of the *chance* occurrence of any kind of “information” in a system is exceedingly small, and that this probability rapidly diminishes as the complexity of the system increases.

This means that, whenever one sees any kind of real ordered complexity in nature, particularly as found in living systems, he can be sure that such complexity was *designed*.

One must conclude that, contrary to the established and current wisdom, a scenario describing the genesis of life on earth by chance and natural causes which can be accepted on the basis of fact and not faith has not yet been written.⁷

I believe we developed this practice (i.e., of postulating pre-biological natural selection) to avoid facing the conclusion that the probability of a self-replicating state is zero. . . . When for practical purposes the concept of infinite time and matter has to be invoked, that concept of probability is annulled.⁸

7 Hubert P. Yockey, “A Calculation of the Probability of Spontaneous Biogenesis by Information Theory,” *Journal of Theoretical Biology*, vol. 67 (1977), p. 398.

8 Peter T. Mora, “The Folly of Probability,” in *The Origins of Prebiological Systems*, ed. Sydney Fox (New York: Academic Press, 1965), p. 45.

There is still the other evolutionary equivocation of natural selection, however. What chance cannot accomplish, evolutionists glibly attribute to natural selection.

So natural selection as a process is okay. We are also pretty sure that it goes on in nature although good examples are surprisingly rare. The best evidence comes from the many cases where it can be shown that biological structures have been optimized — that is, structures that represent optimal engineering solutions to the problems that an animal has of feeding or escaping predators or generally functioning in its environment. . . . The presence of these optimal structures does not, of course, prove that they developed through natural selection, but it does provide strong circumstantial argument.⁹

This is a rather typical example of the way evolutionists evade even the strongest evidences for design. Dr. Raup, with a doctorate from Harvard, is a highly competent geologist, serving as curator of geology at Chicago's great Field Museum, and professor of geology at the University of Chicago. He has candidly acknowledged the complete absence of transitional forms in the fossil record and the complete absence of evidence for observable progressive evolution.

Instead of finding the gradual unfolding of life, what geologists of Darwin's time, and geologists of the present day actually find is a highly uneven or jerky record; that is, species appear in the sequence very suddenly, show little or no change during their existence in the record, then abruptly go out of the record. And it is not always clear, in fact it's rarely clear, that the descendants were actually better adapted than their predecessors. In other words, biological improvement is hard to find.¹⁰

Thus, in spite of the utter lack of evidence in either living populations or the fossil record that natural selection ever generates higher orders of complexity (or "biological improvement," or "better adaptation"), the mere existence of "optimal structures" is taken by evolutionists as confirmation of the remarkable power of natural

9 David M. Raup, "Conflicts Between Darwin and Paleontology," *Bulletin of the Field Museum of Natural History*, vol. 50 (January 1979), p. 25–26.

10 *Ibid.*, p. 23.

selection! As a matter of fact, we have already shown the utter inability of the mutation-selection process to generate complex functioning systems.

And, of course, such a process as natural selection does not even *exist* at the pre-biological level! Whatever effect selection may possibly have had on random processes in later biological reproduction, it is clear beyond any rational argument that chance processes could never have produced even the simplest forms of life in the first place. Without a living God to create life, the laws of probability and complexity prove *beyond doubt* that life could never come into existence at all. Life, at the very simplest level conceivable, has absolutely no possibility of having been generated by any other means than special creation by a living Creator.

Life and the Second Law

Basically, the argument against evolution in terms of probability theory is merely another way of looking at the argument based on entropy, or the second law of thermodynamics. Statistical thermodynamics, in fact, is essentially a probability statement, indicating that disorganized systems are more probable than organized systems. Systems, left to themselves, tend to go from complexity to simplicity, from organization to randomness, from improbable states to more probable states, from low entropy to high entropy.

Dr. V. F. Weisskopf, former president of the American Academy of Arts and Sciences, has pointed up the problem in the following words:

The evolutionary history of the world from the “big bang” to the present universe is a series of gradual steps from the simple to the complicated, from the unordered to the organized, from the formless gas of elementary particles to the morphic atoms and molecules and further to the still more structured liquids and solids, and finally to the sophisticated living organisms. There is an obvious tendency of nature from disorder to order and organization. Is this tendency in contradiction to the famous second law of thermodynamics, which says that disorder must increase in nature? The law says that entropy, the measure of disorder, must grow in any natural system.¹¹

11 Victor F. Weisskopf, “The Frontiers and Limits of Science,” *American Scientist*, vol. 65 (July/August 1977), p. 409.

The “obvious tendency of nature from disorder to order and organization” is, of course, only a religious (humanistic) assumption of evolutionists. The real tendency in the natural world, as expressed by the second law of thermodynamics, is from order and organization to disorder. This very obvious problem is commonly bypassed by evolutionists (including Weisskopf) with the naive statement that the earth is a system open to the energy of the sun, and that there *may be* organizing processes *somewhere*, and that this resolves the problem!

Creationists, in turn, have reminded them that while an open system and available energy constitute *necessary* conditions before a growth in order (or information) can take place, they are not *sufficient* conditions. In addition, there must be a pre-coded program containing the necessary information to direct the growth of the system, and one or more conversion mechanisms to convert the external energy into the highly specific work of internal growth. Since the vast system of the hypothetically evolving biosphere as a space-time continuum seems to lack both a program and a mechanism, other than Prigogine’s irrelevant “dissipative structures,” it is clearly and decisively precluded by the second law.

It has been especially difficult to imagine ways to get life started in the first place. How can unordered non-living chemical elements be combined naturalistically into the extremely sophisticated ordered information in a replicating system? The common belief that this problem has been practically solved by modern biochemists is certainly premature, to say the least. Freeman Dyson said the following more than two decades ago:

We are still at the very beginning of the quest for understanding of the origin of life. We do not yet have even a rough picture of the nature of the obstacles that prebiotic evolution has had to overcome. We do not have a well-defined set of criteria by which to judge whether any given theory of the origin of life is adequate.¹²

And evolutionists are *still* at the very beginning of their futile quest!

The nature of the problem in trying to account for the origin of a replicating system was well expressed by Angrist and Hepler:

12 Freeman Dyson, “Honoring Dirac,” *Science*, vol. 185 (September 27, 1974), p. 1161. Dyson is at Princeton’s Institute for Advanced Study.

Life, the temporary reversal of a universal trend toward maximum disorder, was brought about by the production of information mechanisms. In order for such mechanisms to first arise it was necessary to have matter capable of forming itself into a self-reproducing structure that could extract energy from the environment for its first self-assembly. Directions for the reproduction of plans, for the extraction of energy and chemicals from the environment, for the growth sequence and the mechanism for translating instructions into growth all had to be simultaneously present at that moment. This combination of events has seemed an incredibly unlikely happenstance and often divine intervention is prescribed as the only way it could have come about.¹³

Small wonder! In the real world, every effect must have an adequate cause, but the usual laws of science do not seem to intimidate evolutionists. In the strange wonderland of evolutionary credulity, impossible things may happen: plans draw themselves, mechanisms design themselves, order generates itself from chaos, and life creates itself! Yet evolutionists call creationists unscientific because they postulate an adequate cause (divine intervention) to account for the marvelous effect called life.

In creation-evolution debates, creationists commonly place great emphasis on the second law of thermodynamics as an overwhelming evidence against evolution. Although there have been over 300 such debates held within the period 1972–95 with leading evolutionist professors on major college and university campuses, the latter have never yet been able to come up with an answer of any consequence to the entropy-disorder problem. Even more amazingly, most of them do not even seem to understand the problem, either dismissing it as irrelevant or else making some vacuous reference to ice crystals or open systems or dissipative structures!

Apparently, only a few evolutionists realize the magnitude of the problem and have been trying to find a solution. By far the most important of these efforts was the suggestion of Ilya Prigogine, as noted in chapter 6. Prigogine was a widely known chemist and thermodynamicist, with faculty appointments at both the University Libre de Bruxelles and the University of Texas at Austin. An indication of the strategic

13 Stanley W. Angrist and Loren G. Hepler, *Order and Chaos* (New York: Basic Books, Inc., 1967), p. 203–204.

significance of Prigogine's ideas is that they have won for him the Nobel Prize in chemistry. Judging from the popular announcements, the main reason for this award may well have been the ray of hope Prigogine has given evolutionists in their presumptuous and foredoomed battle with entropy!

According to *Newsweek*, for example, the significance of Prigogine's work is as follows:

Scientists who have sought to explain the origin of life as the result of chemical interactions have been confounded by the second law of thermodynamics: energy tends to dissipate and organized systems drift inevitably toward entropy, or chaos. . . . Prigogine's insights will give biologists new grounds for learning how the first random molecules organized themselves into life forms. . . . Prigogine thinks the Nobel committee recognized that his work is building a bridge between the physical and human sciences.¹⁴

According to an interview in a professional chemical journal, Prigogine himself was "really surprised" at the decision of the Nobel committee. He also said: "The fact that the Nobel committee has chosen this one subject is a great encouragement."¹⁵

If, indeed, Prigogine had shown that the inconceivably tremendous amount of information necessary for molecular self-replication can be produced naturalistically despite the entropy law, his achievement would be well worth the Nobel Prize! It would be all the more remarkable in view of the fact that Prigogine himself has "not actually worked in a chemistry lab for decades."¹⁶

At best, however, he offered only a theoretical speculation, not an experimental demonstration. It is hard to avoid the suspicion that the Nobel award in this case resulted less from the scientific value of Prigogine's achievement, than from the urgent need of the evolutionary establishment for some kind of answer, no matter how superficial, to the entropy problem.

Just how has Dr. Prigogine proposed to harmonize molecular evolution with the second law? Here it is, in his own words:

In all these phenomena, a new ordering mechanism . . . appears. For reasons to be explained later, we shall refer to this

14 "Chemistry: The Flow of Life," *Newsweek* (October 24, 1977), p. 87.

15 *Chemical and Engineering News* (October 17, 1977), p. 4.

16 "Chemistry: The Flow of Life," p. 87.

principle as *order through fluctuations*. The structures are created by the continuous flow of energy and matter from the outside world; their maintenance requires a critical distance from equilibrium, that is, a minimum level of dissipation. For all these reasons we have called them dissipative structures.¹⁷

These “dissipative structures” are supposed to exhibit a higher degree of structure, or order, than they possessed before being subjected to a large influx of outside energy, while at the same time their generation is accompanied by a large dissipation of energy in the form of heat. These structures are, however, very unstable and easily destroyed.

Moreover, dissipative structures could hardly serve as a substrate for still *higher* order, since they themselves require an abnormally large input of energy just to maintain their own structures. Prigogine himself says that, as far as chemical or biological reactions are concerned, the generation of dissipative structures is apparently limited to “auto-catalytic” processes. But catalytic processes, like fluid vortices, do not generate higher order: they merely speed up reactions that themselves are already going downhill thermodynamically in the first place. And any imaginary “auto-catalytic” processes would certainly *require* already-living systems for their own generation, so they can hardly explain the *generation* of living systems!

Although Prigogine wistfully expresses the hope that his speculations may someday lead to an understanding of how life may have evolved from non-life, he is at least more cautious than those of his fellow evolutionists who are currently exuberating over it. He warns:

It would be too simple to say that the concepts of life and dissipative structures are intermingled. . . . But it is not just one instability that makes it possible to cross the threshold between life and non-life; it is, rather, a succession of instabilities of which we are only now beginning to identify certain stages.¹⁸

In a later section of his essay, he again suggests caution:

17 Ilya Prigogine, Gregoire Nicolis, and Agnes Babloyants, “Thermodynamics of Evolution,” *Physics Today*, vol. 25 (November 1972), p. 25.

18 Ilya Prigogine, “Can Thermodynamics Explain Biological Order?” *Impact of Science on Society*, vol. 23, no. 3 (1973), p. 169.

But let us have no illusions. If today we look into the situation where the analogy with the life sciences is the most striking — even if we discovered within biological systems some operations distant from the state of equilibrium — our research would still leave us quite unable to grasp the extreme complexity of the simplest of organisms.¹⁹

One thing is clear. Whatever of scientific value may be deduced from Prigogine's analysis, he has *not* solved the problem of harmonizing entropy with evolution, and he certainly has *not* shown that life can evolve from non-living chemicals! His dissipative structures do not constitute either the required program or the required mechanism to enable any kind of permanently increased order to be produced in an open system. However, he should perhaps be commended for trying. Maybe next someone can work on a perpetual-motion machine!

The problem of the origin of life can really be resolved only by recognition of the omnipotent Creator. The only alternative to belief in special creation is *credulous faith in impotent chance*.

We are faced with the idea that genesis was a statistically unlikely event. We are also faced with the certainty that it occurred. Was there a temporary repeal of the second law that permitted a "fortuitous concourse of atoms?" If so, study of the Repealer and Genesis is a subject properly left to theologians. Or we may hold with the more traditional scientific attitude that the origin of life is beclouded merely because we don't know enough about the composition of the atmosphere and other conditions on the earth many eons ago.²⁰

Yes, not knowing how life could be formed would indeed becloud the understanding of the origin of life! The problem is why this should be called the *scientific* attitude when all the *scientific evidence* continues to support special creation.

Returning to the quotation from V. F. Weisskopf with which this section began, Dr. Weisskopf in no way intended to repudiate evolution because of its apparent conflict with the second law of thermodynamics. However, he, like Prigogine, recognized that there is an apparent

¹⁹ Ibid., p. 178.

²⁰ Angrist and Hepler, *Order and Chaos*, p. 205.

problem, and he felt that he should at least contribute a suggestion as to how it might be resolved. His attempted harmonization, depressingly (for evolutionism), is even less viable than that of Prigogine.

Dr. Weisskopf, indeed, assumed evolution to be so certain that its continual energizing by the sun could be elevated to the status of a *fourth law of thermodynamics*.²¹ He suggested that “order” on earth continually increases as the earth cools from its primeval molten state, and that the continual influx of solar radiation provides the necessary energy for evolutionary work. Dr. Weisskopf also noted that since the cooling of dissolved substances promotes crystallization (and thus increased order), the cooling of the earth’s primeval soupy sea would encourage the analogous “crystallization” of highly ordered organic molecules.

If anyone thinks that the writers have somehow misrepresented these exotic suggestions, he should read the paper firsthand. Further, there is no need to comment on them here, since Dr. George P. Stravopoulos has already done so very effectively in a subsequent issue of the same journal.²² Speaking of Dr. Weisskopf’s ingenious suggestion about crystals and the first living molecules, Dr. Stravopoulos makes the following observation:

He makes it appear as though crystals and highly ordered organic molecules belong in the same class, when in fact they do not. When a crystal is broken up, the smaller crystals are physically and chemically identical to the original. This is never observed with (organic) molecules; when the original molecule is split up, lesser molecules appear, and part of the original information is lost. To ignore such fundamental differences in an effort to arrive at some general overview or law is to create a false overview, a pseudo-law.²³

To which criticism might be added the observation that such dead-end crystals actually contain less “information” than the solution out of which they crystallize. Rather than providing an exception to the second law, they illustrate it!

21 The Third Law describes zero entropy, or perfect order, as occurring at a temperature of absolute zero.

22 George P. Stravopoulos, Letters Section, *American Scientist*, vol. 65 (November/December 1977), p. 675–676.

23 *Ibid.*, p. 675.

Dr. Weisskopf's premature suggestion to make evolution a "fourth law" of thermodynamics is rightly and unequivocally dismissed by Dr. Stravropoulos as follows:

To say that "there is an obvious tendency of nature from disorder to order and organization" and to advance this idea to a "fourth law" is to misunderstand completely and to compromise all of thermodynamics.²⁴

Thermodynamics is highly quantitative, and its laws are as fully confirmed as any laws of science can be confirmed; but the notion of the sun's energy driving the evolutionary process is about as fully *unconfirmed* as any process ever concocted by human speculation.

Dr. Stravropoulos continues thus:

Under ordinary conditions, no complex organic molecule can ever form spontaneously but will rather disintegrate, in agreement with the second law. Indeed, the more complex it is, the more unstable it is, and the more assured, sooner or later, is its disintegration. Photosynthesis and all life processes, and life itself, despite confused or deliberately confusing language, cannot yet be understood in terms of thermodynamics or any other exact science.²⁵

The *coup de grace* to the facile notion that solar energy produces terrestrial evolution is administered when it is pointed out that the influx of raw heat energy to an open system *increases* (not decreases!) the *entropy* (disorder) of that system. This is a fundamental principle of thermodynamics. That is, unmodified, undirected solar energy impacting on the earth would cause internal disintegration, not evolution! Listen again to Dr. Stravropoulos in summary:

The thrust of Dr. Weisskopf's argument that order appears in a cooling body — runs against his statement that the flow of heat from the sun to the earth resulted in photosynthesis and the development of "highly hierarchical" forms of organic matter on earth. For one thing, why only earth? Why has Mars failed the test? And for another, the sun cools and earth necessarily warms up (if we consider only the "sun-earth

24 George P. Stravropoulos, Letters Section, *American Scientist*, vol. 65 (November/December 1977), p. 675.

25 Ibid., p. 676.

system”) and therefore it is the sun that should be drawing toward order, earth toward disorder.²⁶

The writers hope, too optimistically perhaps, that the discussion in this and the preceding chapter will permanently dispel the evolutionary misconception that the “open-system” argument somehow harmonizes entropy and evolution. An open system is, indeed, a *necessary* condition for a decrease of entropy in that system, but it is far from being a *sufficient* condition!

Some writers use the term “negentropy,” and talk about negentropy entering a system to increase its complexity. Since there is no such thing as “negentropy,” this idea is also fruitless.

Certain old untenable ideas have served only to confuse the solution of the problem. Negentropy is not a concept because entropy cannot be negative. The role that negentropy has played in previous discussions is replaced by “complexity” as defined in information theory.²⁷

Complexity and information do not flow into a system by chance, of course. Once again, there must be both a control system of some complex form and a storage-conversion mechanism of some kind before this can happen. Since evolution has *neither* a control system, *nor* a conversion mechanism, evolution will not happen.

An uninvited guest at any discussion of the origin of life and of evolution from the materialistic reductionist point of view is the role of thermodynamic entropy and the “heat death” of the universe which it predicts.²⁸

As far as the naturalistic evolution of life from non-living chemicals is concerned, therefore, neither Weisskopf nor Prigogine nor anyone else has provided the slightest evidence of any mechanism for overcoming the impregnable entropy barrier. Yockey’s evaluation of this whole idea is a fitting conclusion:

The “warm little pond” scenario was invented *ad hoc* to serve as a materialistic reductionist explanation of the origin of life. It is unsupported by any other evidence, and it will remain *ad hoc* until such evidence is found. . . . One must conclude

26 Ibid.

27 Hubert P. Yockey, “A Calculation of the Probability of Spontaneous Biogenesis by Information Theory,” *Journal of Theoretical Biology*, vol. 67 (1977), p. 377.

28 Ibid., p. 380.

that, contrary to the established and current wisdom, a scenario describing the genesis of life on earth by chance and natural causes which can be accepted on the basis of fact and not faith has not yet been written.²⁹

Complexity and Cosmic Bootstraps

No matter what the laws of probability or the laws of thermodynamics imply, however, evolutionists are insistent that somehow life has evolved from non-life and order has arisen out of chaos, all without benefit of a Creator or of intelligent design.

In their more public pronouncements, researchers interested in the origin of life sometimes behave a bit like the creationist opponents they so despise — glossing over the great mysteries that remain unsolved and pretending they have firm answers that they have not really got. . . . We still know very little about how our genesis came about, and to provide a more satisfactory account than we have at present remains one of science's great challenges.³⁰

The overwhelming difficulties involved in breaching this entropy and probability barrier are not appreciated adequately by evolutionists. Even if they choose to ignore these fundamental scientific laws, they yet will find it impossible to devise a biochemical explanation for the origin of life that doesn't require some unknown process which, in terms of known science, at least, would amount to a miracle. One writer uses the bootstrap figure, though he himself is a committed evolutionist, possibly of "new age" leanings.

A natural and fundamental question to ask on learning of these incredibly interlocking pieces of software and hardware is: "How did they ever get started in the first place?" It is truly a baffling thing. One has to imagine some sort of bootstrap process occurring, somewhat like that which is used in the development of new computer languages — but a bootstrap from simple molecules to entire cells is almost beyond one's power to imagine. There are various theories on the origin of life. They all run aground on this most central of all central

29 Hubert P. Yockey, "A Calculation of the Probability of Spontaneous Biogenesis by Information Theory," *Journal of Theoretical Biology*, vol. 67 (1977), p. 398.

30 Andrew Scott, "Update on Genesis," *New Scientist*, vol. 106 (May 2, 1985), p. 32.

questions: “How did the Genetic Code, along with the mechanisms for its translation (ribosomes and RNA molecules), originate?” For the moment, we will have to content ourselves with a sense of wonder and awe, rather than with an answer.³¹

A similar admission was made by Leslie Orgel, certainly one of the most distinguished scientists working in this field:

We do not yet understand even the general features of the origin of the genetic code. . . . The origin of the genetic code is the most baffling aspect of the problem of the origins of life, and a major conceptual or experimental breakthrough may be needed before we can make any substantial progress.³²

As a matter of fact, nothing less than a miracle would be required to create life from non-living chemicals. Creationists have long insisted that the second law of thermodynamics constitutes an impregnable natural barrier against any such event’s ever occurring by chance. In response, evolutionists have simply, and monotonously, continued to berate creationists for misrepresenting the second law.

Thermodynamics applies only to isolated systems, they say (although no thermodynamics textbook says any such thing), and creationists don’t realize that the earth is an open system (but creationists do realize this, and have always developed their arguments in the context of open-system thermodynamics). Evolutionists seem to have a strange mental block at this point. If they *really* understood the legitimate implications of the second law in origin-of-life problems, of course, they would have to repudiate *either* evolution or the second law.

One of the few evolutionary biochemists who have seriously addressed this problem is Germany’s Manfred Eigen, and he rather arrogantly glosses over the problems encountered in his efforts. Note the following statements excerpted from an article that attempts to imagine this process.

It was therefore necessary for the first organizing principle to be highly selective from the start. It had to tolerate an enormous overburden of small molecules that were biologically

31 Douglas R. Hofstadter, *Godel, Escher, Bach: An Eternal Golden Braid* (New York: Vintage Books, 1980), p. 548.

32 Leslie Orgel, “Darwinism at the Very Beginning of Life,” *New Scientist*, vol. 94 (April 15, 1982), p. 151.

“wrong” but chemically possible. . . . The primitive soup did face an energy crisis, early life forms needed somehow to extract chemical energy from the molecules in the soup. For the story we have to tell here it is not important how they did so; some system of energy storage and delivery based on phosphates can be assumed.³³

This requirement of an energy storage and delivery system is exactly what creationists have always insisted is necessary to drive a system upward toward higher complexity against its innate tendency (as expressed in the second law of thermodynamics) to go downward. Note, however, that Eigen did not *describe* such a system — he merely *assumed* it! Further, he assumed that it was somehow based on “phosphates,” which are, indeed, important energy storage-and-delivery systems in already living-and-replicating organisms. But, these marvelous “batteries” are themselves produced by the metabolism of the living systems that they energize. Eigen also glides over this problem:

Non-metabolic replenishment of the phosphate energy reservoir . . . had to last until a mechanism evolved for fermenting some otherwise unneeded components of the soup.³⁴

Ah, here is another unknown *mechanism* that must be *assumed* in order to reverse the downhill direction otherwise specified by the second law. But that is not all. Eigen continues as follows:

One can safely assume that primordial routes of synthesis and differentiation provided minute concentrations of short sequences of nucleotides that would be recognized as “correct” by the standards of today’s biochemistry. . . . The primitive RNA strands that happened to have the right backbone and the right nucleotides had a second and crucial advantage. They alone were capable of stable self-replication.³⁵

Exactly what these “primordial routes of synthesis and differentiation” may have been, we, of course, do not know; but we may, nevertheless,

33 Manfred Eigen et al., “The Origin of Genetic Information,” *Scientific American*, vol. 244 (April 1981), p. 88.

34 Ibid.

35 Ibid., p. 91.

“safely assume them!” And although many incorrect sequences of nucleotides, no doubt, were assembled in the unknown processes of this scenario, those which happened to be correct were able to reproduce themselves and so managed to survive, so the script goes.

This imaginative scenario is offered to us in all seriousness as an explanation of how life could have evolved from non-life, despite the negative pressures imposed by the second law. Eigen and his associates have dressed these statements of faith in impressive mathematical and biochemical verbiage, and have even claimed experimental confirmation of one or two steps in the long process, so that some evolutionary biologists now merely refer to Eigen when confronted with the second-law argument against evolution.

Nevertheless, the basic problem is still completely unsolved. Eigen, *et al.*, did not even attempt to deal with the barrier of stereo-chemistry (the universal prevalence of “left-handed” amino acids in the protein structure of living systems, as against the uniform distribution of left-handed and right-handed molecules in non-living systems), nor did they deal with the evolution of nucleic acids into proteins, nor with many other key problems in the origin of life. Furthermore, they could not solve the all-important “chicken-egg” problem:

Which came first, function or information? As we shall show, neither one could precede the other; they had to evolve together.³⁶

Despite the high claims and reputation of their advocates, such speculations are pointless.

No creationist has ever denied that the earth is an open system (although evolutionist after evolutionist keeps repeating this falsehood), nor that it has always had an abundance of solar energy accessible to its processes. Solar energy sustains the earth’s atmospheric circulation and its hydrologic cycle, but it does not generate life in an organic soup. Solar energy produces tornadoes, but tornadoes do not fabricate airplanes. Solar energy perpetually bathes the building materials resting on a construction site, and these constitute a patently open system, but it would never in a billion, billion years organize these components into a building.

How can evolutionists remain so stubbornly blind to the fact that, thermodynamically, an energy field imposed on a complexly organized

36 Ibid.

open system will cause the system to become *less* organized, not *more* organized, *unless* that open system also has, intrinsic to its structure, a pre-programmed information system (e.g., the genetic code), and a pre-packaged storage-conversion-delivery system for the incoming energy (e.g., photosynthesis) to direct and energize its growth in complexity?

The thermodynamic barrier to the naturalistic synthesis of life has often, and alternatively, been expressed in terms of probabilities. But evolutionary biologists have been confronted with this probabilistic argument many times before, and they respond merely (and wisely?) by ignoring it. The only alternative to a naturalistic origin of life is the creation of life, and this they consider to be unthinkable. No matter how improbable it may be, life must have arisen *by chance* somehow, because here we are! . . . so the “reasoning” goes.

Many evolutionists have sought to escape the probability argument by appealing to the great expanse of geological time. Any impossible thing becomes possible if there is enough time, they hope.

There is really not that much time, however, *even if* the geological ages have been correctly identified and dated by the accepted methods of geochronometry. The problem is that life originated almost as soon as the primeval earth became cool enough to permit life to survive. The earth *is said* to be 4.6 billion years old, but the oldest dated rocks are assigned a 3.8 billion-year date, and the oldest life forms (fossil prokaryotes in South Africa) are dated at more than 3.4 billion years. Stephen Jay Gould acknowledges the time problem thus:

We are left with very little time between the development of suitable conditions for life on the earth’s surface and the origin of life. . . . Life apparently arose about as soon as the earth became cool enough to support it.³⁷

But Gould, instead of acknowledging creation, has instead used the sudden origin of life on earth as an argument supporting his own approach to evolution, the so-called “punctuated-equilibrium” mechanism:

Gradualism . . . was primarily a prejudice of nineteenth-century liberalism facing a world in revolution. But it continues to color our supposedly objective reading of life’s history. . . . The history of life, as I read it, is a series of long stable states,

37 Stephen Jay Gould, “An Early Start,” *Natural History*, vol. 87 (February 1978), p. 10, 24.

punctuated at rare intervals by major events that occur with great rapidity and set up the next stable era. . . . My favorite metaphor is a world of occasional pulses, driving recalcitrant systems from one stable state to the next.³⁸

So Gould takes the position that life arose explosively, just as did all later evolutionary advances in the history of life. The particular reaction — or series of reactions — which thus quickly transmuted chemicals into living cells remains yet to be discovered (or imagined, or invented), of course.

Sir Fred Hoyle, on the other hand, says that it is inconceivable thermodynamically that life could have arisen by chance here on the earth at all, even in five billion years! Instead of concluding that it must have been created on the earth, however, Sir Fred says that life must therefore be a cosmic phenomenon, translated to earth somehow from outer space.

Some have dismissed his ideas rather smugly, since he is not a biochemist.³⁹ However, the “directed panspermia” theory of Leslie Orgel and Francis Crick (co-discoverer of DNA) is not very much different from Hoyle’s speculations, and these two men are among the world’s top biochemists. They have argued that “life-seeds” have been directed through space by advanced civilizations in other galaxies, hence the term *directed panspermia*. Hoyle speaks of a “life cloud” permeating space. But all agree that life could not have evolved on the earth by chance.

Hoyle and his colleague, Chandra Wickramasinghe, have gone even further. The same type of probability calculation that they applied to geologic time on earth was also applied, with only slightly modified numbers, to cosmic time in the whole universe. Thus, they concluded finally that life in space must be the product of intelligent creation, and they are even willing to speak of God.

Once we see that the probability of life originating at random is so utterly minuscule as to make it absurd, it becomes sensible to think that the favourable properties of physics, on which life depends, are in every respect *deliberate*. It is almost

38 Ibid., p. 24.

39 Sir Fred Hoyle is best known as the originator of the Steady-State Theory of cosmogony, but he has written extensively on many important scientific themes. For many years he was University Lecturer in Mathematics at Cambridge University. He later was an honorary research professor at Manchester University and University College, Cardiff. By any reckoning, he has been one of the most original thinkers among modern scientists.

inevitable that our own measure of intelligence must reflect higher intelligence — even to the limit of God.⁴⁰

These two very distinguished scientists have thus in recent years become converts (of a sort) to creationism (of a sort) and have suffered much rejection and ridicule by their erstwhile colleagues. Dr. Wickramasinghe has testified that he was previously a consistent atheistic Buddhist, but he has reluctantly been forced to a creationist position by the scientific facts. He was even willing to testify for the creationist side at the creation law trial in Arkansas in 1981.

The most interesting aspect of their conversion to creationism was that the Bible had nothing to do with it. Evolutionists have continually insisted that creationists are creationists because of their belief in the Bible, so the Hoyle-Wickramasinghe conversion was a particular embarrassment. These two scientists do not believe in either the biblical record of creation or even in the God of the Bible. Nevertheless, they insist that solid scientific considerations compel them, reluctantly, to conclude that life can only be the product of some cosmic intelligence, not of any kind of naturalistic evolutionary process, and they are even willing to call it God.

Evolutionists, therefore, still have no factual evidence, or even a workable model, to account for this very first stage in organic evolution. If there is any kind of evolutionary family tree, it is a tree without roots! The infinitely complex structures, symbiotic relationships, and informational programs found in all living cells are separated by an unbridgeable thermodynamic and probabilistic gulf from all non-living systems, and more and more *careful* and *consistent* scientists are recognizing this fact today.

An important evolutionary biochemist who has made similar probability calculations on the origin of life is Dr. Hubert P. Yockey. In an article entitled “Self-Organization Origin of Life Scenarios and Information Theory,” he acknowledges the following:

The calculations presented in this paper show that the origin of a rather accurate genetic code, not necessarily the modern one, is a *pons asinorum* which must be crossed over the abyss which separates crystallography, high polymer chemistry and physics from biology. The information content of amino acid sequences cannot increase until a genetic code with an

40 Fred Hoyle and Chandra Wickramasinghe, *Evolution from Space* (London: Dent, 1981). Wickramasinghe is Professor of Astronomy and Applied Mathematics at University College, Cardiff.

adapter function has appeared. Nothing which even vaguely resembles a code exists in the physico-chemical world. One must conclude that no valid scientific explanation of the origin of life exists at present.⁴¹

For those unfamiliar with Latin, *pons asinorum* means “bridge of asses,” a colorful metaphor for an exceedingly difficult bridge to negotiate. If the rest of the jargon in the quotation is troublesome, the last sentence is clear enough, and that is the crucial admission!

But when this or similar probability arguments are used in creation-evolution debates, as discussed before, the evolutionists’ shamefully weak response is usually something like this: “Yes, but every individual combination of factors has exactly the same probability; the one that specified life is no more improbable than any other, so the argument from probability is meaningless.”

Yockey’s response to such a naive reply is kind, but pointed and helpful:

A practical man will not believe a scenario which appears to him to have a very small probability. . . . If a tossed coin is observed to fall heads ten times consecutively, a practical man will believe it to be two-headed *without examining it*, even though the sequence of all heads is exactly as probable as any other sequence.⁴²

One can easily calculate that the number of possible sequences in a ten-sequence coin toss is 1,024 (or 2^{10}), so the probability of a sequence of heads ten times in a row is 1 out of 1,024. Even though no “practical” gambler would bet on a thousand-to-one shot, this probability is really an extremely high probability compared to the extremely low probability of a chance assemblage of chemical molecules into a meaningful and functioning genetic code of any kind whatever. As Hoyle has shown (along with many others), the universe is neither big enough nor old enough for it ever to have happened *even once* by chance. Life *must* have been specially created.

Conditions in the Primeval Soup

Apart from the question of complexity and probability, there would also have to be just the right environmental conditions for any imaginary

41 Hubert P. Yockey, “Self-Organization Origin of Life Scenarios and Information Theory,” *Journal of Theoretical Biology*, vol. 91 (1981), p. 26.

42 Ibid., p. 27.

simple-life form to evolve from non-life, and then to survive and reproduce on the primitive earth. The speculations associated with this scenario — especially in view of the fact that the “spontaneous generation” of bacterial life in the present world was completely disproved by Louis Pasteur a hundred years ago — have been wildly imaginative, to say the least.

For more than 25 years, school children have been taught the imaginary drama of life’s beginning on the primeval earth perhaps three billion years ago. The scenario has assumed an ancient atmosphere containing no oxygen, since an oxidizing environment would have destroyed any supposed molecules on the verge of evolving into living systems. Stanley Miller’s famous laboratory apparatus, by which he synthesized certain amino acids in a gaseous mixture simulating this hypothetical atmosphere, has appeared on the pages of innumerable classroom textbooks; and the book *Origin of Life on Earth* by the Russian Communist Oparin, has been taught as dogma almost everywhere.

Now, however, like so many other evolutionary fables, the primeval “reducing” atmosphere is being dissipated by the hard facts of science. For more than a decade now, various scientists have been developing a wide range of evidences that the earth’s atmosphere was rich in oxygen right from the beginning! In an important study,⁴³ two British geologists have accumulated a mass of geological evidence that the ancient earth never had a reducing atmosphere at all. They conclude thus:

The existence of early red beds, sea and groundwater sulphate, oxidized terrestrial and sea-floor weathering crusts, and the distribution of ferric iron in sedimentary rocks are geological observations and inferences compatible with the biological and planetary predictions. It is suggested that from the time of the earliest dated rocks at 3.7 b.y. ago, earth had an oxygenic atmosphere.⁴⁴

This fact means, of course, that life could never have evolved from non-life, at least by this method, and that all the textbooks need to be rewritten. But since belief in evolution is really religious rather than scientific, atheistic scientists do not intend to become creationists. Rather, they merely search for another evolutionary scenario. The one that they suggest currently is that life evolved somewhere *else* in the universe and was transported to earth!

43 H. Clemmey and N. Badham, *Geology*, vol. 10 (March 1982), p. 141–146.

44 *Ibid.*, p. 141.

An interesting recent confirmation of an oxygen-abundant atmosphere in the primordial earth has come from Australia.

The oldest plant life ever found has been discovered in the Western Australian outback. Resembling seaweed, it grew about 1,100 million years ago, compared with an age of 540 million years for the previously oldest-known plants.

This discovery has thrown into confusion the history of how the earth's atmosphere evolved.⁴⁵

The reason for such confusion is that plants require an oxygenized atmosphere, not the "reducing atmosphere" long assumed by A. I. Oparin, Stanley Miller, and other conjecturing "authorities" whose names have been eulogized in countless high-school textbooks as the men who presumably "proved" that life evolved abiogenetically.

The famous experiment of Miller, who was able to produce certain amino acids in his laboratory under conditions supposedly simulating conditions on the primitive earth, has frequently been cited as of importance almost equal to the work of Charles Darwin. His experiment was entirely artificial, of course, and came nowhere near to producing life in the laboratory, as many of the credulous have been led to believe. Miller's conclusion has been completely negated now by the rapidly growing knowledge that the primeval earth did not have the required reducing atmosphere at all. This refutation has not shaken Miller's faith in abiogenesis, however. In a review article on the current status of origin-of-life theory, John Horgan comments as follows:

Miller, who after almost four decades is still in hard pursuit of life's biggest secret, agrees that the field needs a dramatic finding to constrain the rampant speculation. . . . Does he ever entertain the possibility that genesis was a miracle not reproducible by mere humans? Not at all, Miller replies. "I think we just haven't learned the right tricks yet."⁴⁶

Rampant Speculation

Stanley Miller spoke disparagingly of the "rampant speculation" that is plaguing origin-of-life studies — just as if his own widely publicized

45 Adiran Berry, "Oldest Plants Breathe Chaos into Life Theory," *London Daily Telegraph*, June 2, 1990.

46 John Horgan, "In the Beginning," *Scientific American*, vol. 264 (February 1991), p. 125.

scenario had been sober science! Horgan reviewed some of these speculations, and got Miller's opinion concerning them, noting that they were all being put forth by credentialed biochemists:

That bothers Miller, who is known as both a rigorous experimentalist and a bit of a curmudgeon. . . . He calls the organic-matter-from-space concept "a loser," the vent hypothesis "garbage" and the pyrite theory "paper chemistry." Such work, he grumbles, perpetuates the reputation of the origin-of-life field as being on the fringe of science and not worthy of serious pursuit.⁴⁷

And how does Stanley Miller, the "rigorous experimentalist," now think life began?

The current version of genesis held by Miller and others is also couched in Darwinian terms. Life began, they say, when some compound or class of compounds developed the ability to copy itself in such a way that it occasionally made heritable "mistakes." These mistakes sometimes produced generations of molecules that could replicate more efficiently than their predecessors. Voila: evolution, and so life.⁴⁸

Isn't Darwinism magnificent? It offers us natural selection not only to explain the origin of species, but also the origin of life! This amazing concept is tendered without one iota of experimental evidence, rigorous or otherwise! Didn't Miller say something about "rampant speculation"?

Furthermore, Darwinian selection is supposed not only to account for the origin of life and the origin of new species. Somehow, in between these two end-points of the selection spectrum, it supposedly also produces the evolution of cells:

What is life? No one would accuse the new breed of mathematical biologists of setting their sights too low. . . . The accepted theory of cell evolution says that each of the various cell types in the human body evolved through the rigors of Darwinian natural selection; that is, by conveying some competitive advantage on those of our evolutionary ancestors who had it. . . . The human genome may be a self-organizing system,

47 John Horgan, "In the Beginning," *Scientific American*, vol. 264 (February 1991), p. 118.

48 Ibid.

like his computer model: it may produce the range of human cell types on its own.⁴⁹

It is all so simple, on paper. Everything organizes itself and, if it's good, natural selection preserves it!

One cannot prove a universal negative, of course, and we do not have access to a time machine. Who knows what magical events Mother Nature might have generated a billion years ago? We *do* know such things do not happen now, however.

As of now, all life is built around the marvelous DNA molecule, and there is no clue as to how DNA was first formed.

DNA cannot do its work, including forming more DNA, without the help of catalytic proteins, or enzymes. In short, proteins cannot form without DNA, but neither can DNA form without proteins.⁵⁰

There is that old chicken-and-egg conundrum again. Perhaps the proteins — if they could not be formed by DNA (deoxyribose nucleic acid) — could be dependent on some other nucleic acid. But it's still the same problem:

We are grappling with a classic “chicken and egg” dilemma. Nucleic acids are required to make proteins, whereas proteins are needed to make nucleic acids and also to allow them to direct the process of protein manufacture itself.⁵¹

The emergence of the gene-protein link, an absolutely vital stage on the way up from lifeless atoms to ourselves, is still shrouded in almost complete mystery.⁵²

To the creationist, of course, the origin of life is no mystery at all!

Dr. Leslie Orgel, to whom we have referred before as one of the leading researchers in this field, is a colleague of Dr. Stanley Miller (of amino-acid-synthesis fame) at the University of California at San Diego. He was also associated with Sir Francis Crick (famous as the co-discoverer of DNA) in the development of their notorious “directed panspermia” theory, which proposed the following:

49 Gary Taubes, “The Body Chaotic,” *Discover*, vol. 10 (May 1989), p. 67.

50 John Horgan, “In the Beginning,” p. 119.

51 Andrew Scott, “Update on Genesis,” *New Scientist*, vol. 106 (May 2, 1985), p. 31.

52 *Ibid.*, p. 33.

That the seeds of life were sent to the earth in a spaceship by intelligent beings living on another planet. Orgel says the proposal, which is known as directed panspermia, was “sort of a joke.” But he notes that it had a serious intent: to point out the inadequacy of all explanations of terrestrial genesis. As Crick once wrote: “The origin of life appears to be almost a miracle, so many are the conditions which would have had to be satisfied to get it going.”⁵³

Presumably Orgel has now abandoned this idea, which his U.C.S.D. colleague, Stanley Miller, called a “loser,” but many other scientists are still actively promoting some form of extra-terrestrial origin of life on earth. This was one of the main topics discussed at a recent conference on “chirality,” the “handedness” of amino acids in stereoptical activity within cells.⁵⁴

Orgel commented on this phenomenon thus over a decade ago:

Since the time of Louis Pasteur, the origin of optical activity in biological systems has attracted a great deal of attention. Two very different questions must be answered. First, why do all amino acids in proteins or all nucleotides in nucleic acids have the same handedness? Secondly, why are the amino acids all left-handed (L-) and the nucleotides all right-handed (D-)?⁵⁵

The answer to this extremely critical question was not obtained at the conference, however, although the discussion was quite heated. Miller and others merely “rolled their eyes” at the theory that the phenomenon had an extra-terrestrial source, but advocates of the latter kept pointing out that all terrestrial-source theories had proved sterile. The problem, of course, stems from the fact that amino acids in living organisms are all “left-handed,” whereas in non-living systems they are “racemized” — that is, with evenly mixed left-handed and right-handed

53 John Horgan, “In the Beginning,” p. 125.

54 The conference on “The Origin of Homochirality” was held in February 1995 in Santa Monica. The participants argued vigorously about its origin, but all agreed that: “Homochirality . . . is necessary for present-day life because the cellular machinery that has evolved to keep organisms alive and replicating, from microorganisms to humans, is built around the fact that genetic material veers right and amino acids veer left.” (*Science*, vol. 267, March 3, 1995), p. 1265.

55 Leslie Orgel, “Darwinism at the Very Beginning of Life,” *New Scientist*, vol. 94 (April 15, 1982), p. 151.

molecules. One of the fatal flaws in Stanley Miller's famous experiment, of course, was that the amino acids generated in his apparatus were racemized, and so could not have been potential precursors of life, despite Miller's claim.

Anyway, Orgel has apparently given up on directed panspermia and, along with others, is now promoting the idea that the answer is in RNA, instead of DNA.

We proposed that RNA might well have come first and established what is now called the RNA world.⁵⁶

Orgel and his followers have worked out a sort of scenario by which this *might* have happened. However, there are major problems:

This scenario could have occurred, we noted, if prebiotic RNA had two properties not evident today: a capacity to replicate without the help of proteins and an ability to catalyze every step of protein synthesis.⁵⁷

Orgel writes as though these "ifs" were just trivial problems! Indeed such properties are *not* evident today, and there is not a bit of evidence that they *ever* could have existed in the past. If RNA, or any other molecule, could replicate itself unaided, *that* would be *life*, not a stage in the development of life. But that's the very problem! It is like saying that we could explain the origin of life if only we could explain the origin of life.

But as researchers continue to examine the RNA world concept closely, more problems emerge. How did RNA arise initially? RNA and its components are difficult to synthesize in a laboratory under the best of conditions, much less under plausible prebiotic ones. For example, the process by which one creates the sugar ribose, a key ingredient of RNA, also yields a host of other sugars that would inhibit RNA synthesis. Moreover, no one has yet come up with a satisfactory explanation of how phosphorus, which is a relatively rare substance in nature, became such a crucial ingredient in RNA (and DNA).⁵⁸

56 Leslie E. Orgel, "The Origin of Life on the Earth," *Scientific American*, vol. 271 (October 1994), p. 78.

57 Ibid.

58 John Horgan, "In the Beginning," p. 119.

Orgel himself is aware of the problems, but he remains stubbornly optimistic.

The precise events giving rise to the RNA world remain unclear. As we have seen, investigators have proposed many hypotheses, but evidence in favor of each of them is fragmentary at best. The full details of how the RNA world, and life, emerged may not be revealed in the near future.⁵⁹

The evidence is indeed “fragmentary” — more like non-existent!

Stanley Miller has recently joined his UCSD colleague, Jeffrey Bada, in a new rampant speculation. They propose that the surface of the primeval earth was an ocean of ice covering a liquid ocean of prebiotic soup in which primitive replicating molecules could form. The ice shell, several hundred meters thick, was then cracked upon by collision with a wandering planetesimal, which led to the melting of the entire shell, the evolution of the present ocean, and the evolution of life.⁶⁰ We anxiously await the next speculation!

Professor Dr. Klaus Dose, director of the Institute for Biochemistry in the Johannes Gutenberg University in Germany, probably knows as much about this type of study and speculation as anyone. In a 1988 review, while considering how chirality could originate in RNA or DNA or in any other living substance, he said this:

In spite of many attempts, there have been no breakthroughs during the past 30 years to help to explain the origin of chirality in living cells.⁶¹

The 1994 chirality conference didn't solve the problem either.

The review by Klaus Dose covers much more than this strange phenomenon of mono-chirality, however.

More than 30 years of experimentation on the origin of life in the fields of chemical and molecular evolution have led to a better perception of the immensity of the problem of the origin of life on earth, rather than to its solution. At present all discussions on principal theories and experiments in the

59 Leslie Orgel, “Origin of Life on Earth,” p. 83.

60 Jeffrey L. Bada, “Cold Start,” *The Sciences*, vol. 35 (May/June 1995), p. 21–25.

61 Klaus Dose, “The Origin of Life: More Questions than Answers,” *Interdisciplinary Science Reviews*, vol. 13, no. 4 (1988), p. 352.

field either end in stalemate or in a confession of ignorance.⁶²

Professor Dose goes on to describe some of the problems involved:

The problem is that the principal evolutionary processes from prebiotic molecules to progenotes have not been proven by experimentation and that the environmental conditions under which these processes occurred are not known. Moreover we do not actually know where the genetic information of all living cells originates, how the first replicable polynucleotides (nucleic acids) evolved, or how the extremely complex structure-function relationships in modern cells came into existence.⁶³

Dose could almost have said that, after half a century of intense searching for a naturalistic explanation of life's origin, we now know nothing whatever about it, and we should accept the obvious fact that life was created by an omnipotent living Creator. He could not say that, of course, because he is an evolutionist. If he *had* tried to say that, his article would not have been published and he probably would have been asked to resign his position. He did, however, dare to draw the following conclusion:

It appears that the field has now reached a stage of stalemate, a stage in which hypothetical arguments often dominate over facts based on experimentation or observation.⁶⁴

In other words, pronouncements on the origin of life are based either on philosophy or religion, or on sheer prejudicial speculation.

The conclusion of Paul Erlich is similar:

Why then does the scientific theory of evolution hold on to the concept of chance to the degree it does? I suspect it is the fact that there is no alternative whatsoever that could explain the fact of universal evolution at least in principle, and be formulated within the framework of natural science. If no alternative should be forthcoming, if chance remains overtaxed, then the conclusion seems inevitable that evolution and therefore living beings cannot be grasped by natural science to

62 Ibid., p. 348.

63 Ibid.

64 Ibid., p. 349.

the same extent as non-living things — not because organisms are so complex, but because the explaining mechanism is fundamentally inadequate.⁶⁵

More than 25 years ago, the president of the Carnegie Institute of Washington wrote a significant summary of the state of origin-of-life knowledge as it existed at that time. His comments are as relevant and incisive today as then:

But the most sweeping evolutionary questions at the level of biochemical genetics are still unanswered. How the genetic code first appeared and then evolved and, earlier even than that, how life itself originated on earth remain for the future to resolve, though dim and narrow pencils of illumination already play over them. The fact that in all organisms living today the processes both of replication of the DNA and of the effective translation of its code require highly precise enzymes and that, at the same time, the molecular structures of those same enzymes are precisely specified by the DNA itself, poses a remarkable evolutionary mystery.⁶⁶

The DNA molecule and the enzymes are *both* extremely complex systems, and each is necessary for the other. There is no known way that they could both have evolved from simpler chemicals. Dr. Haskins continues with the following surprising comment on this thermodynamic mystery:

Did the code and the means of translating it appear simultaneously in evolution? It seems almost incredible that any such coincidence could have occurred, given the extraordinary complexities of both sides and the requirement that they be coordinated accurately for survival. By a pre-Darwinian (or a skeptic of evolution after Darwin) this puzzle would surely have been interpreted as the most powerful sort of evidence for special creation.⁶⁷

65 Paul Erlich, "On the Probability of the Emergence of a Protein with a Particular Function," *Acta Biotheoretica*, vol. 34 (1985), p. 53.

66 Carl P. Haskins, "Advances and Challenges in Science in 1970," *American Scientist*, vol. 59 (May/June 1971), p. 298.

67 Ibid.

Creation indeed seems to be the only logical explanation for the marvelous complexity of the simplest forms of living matter. Nothing less than the Creator could supply the astronomic gain in order, represented by the simplest protein molecule.

Despite the intense prejudice against creationism (possibly, in many cases, an unrecognized but intense emotional desire to escape any possibility of human responsibility to one's Creator) and against creationist scientists, regardless of their qualifications, the fact still remains that the creation model is the only model of origins that explains and correlates the scientific data relative to the origin of life. If this entails any personal responsibility to the Creator, so be it. The honest and true scientist should accept the testimony of clear and evidential factuality *even if* it makes him emotionally — or spiritually — uncomfortable.

Chapter 8

The Heavens Don't Evolve, Either

The thoroughgoing evolutionist is not content with trying to explain the origin of the species, or the origin of life. He must also encompass, if he can, the origin of the universe itself, and of the very elements of matter, within his theory of naturalistic evolution. As a total evolutionist, he would, if possible, eliminate God as Creator completely from any relation to the universe at all. Consequently, he has developed complex (and continually changing) models of cosmic evolution, stellar evolution, galactic evolution, planetary evolution, and even chemical evolution, in seeking to find explanations for *everything* without God.

Every such model, however, will be found to have fatal flaws, and that is why evolutionists are continually debating and changing their models. These cosmological “theories” seem to have great popular appeal. Both the popular press and the journals of general science regularly pour out eulogizing articles on every new speculation in cosmology that is suggested by the astronomers and cosmophysicists. Therefore, it is necessary to devote a chapter to this rather esoteric subject.

Creation and the Cosmos

First, we should note how perfectly all the physical evidence *confirms* the obvious predictions of the creation model, whereas the evolution model *fails* every test. We should remember that the basic predictions of the creation model are those of conservation and decay. That, of course, is exactly what we see in the heavens, everywhere and always. No one ever *sees* any evolution taking place in the physical cosmos at all. Evolutionary

concepts in this realm are *entirely* mathematical and philosophical, *not* experimental and observational.

The creation model stipulates that God created all things perfect and complete in a short period of special creation in the beginning. This means that any changes since the creation could not be “creative” or innovative changes, but only deteriorative changes. The Creator, being both omniscient and omnipotent, knew perfectly what to do, and was able to do it, creating every system — whether stars or planets or animals or people — perfect and complete, and functioning to begin with.

Although this stipulation does not preclude future changes in the created systems of the cosmos, it does require that any such changes be in the direction of deterioration of the primeval perfection. Since the Creator is not the “de-creator,” the creation itself would continue undiminished in scope, but nothing new would be added: no new stars or planets or basic types of living organisms. On the other hand, by the corollary principle of disintegration, stars and planets may break up, species may atrophy or even become extinct, and people may die, but the universe and life go on.

As we have seen in chapter 6, these two stipulations of the creation model — that is, conservation in quantity, and decay in quality — are explicitly fulfilled in the two most certain and invariable laws of science, the first and second laws of thermodynamics. The first law says that, although matter and energy can be changed in form, the total quantity of mass/energy is always “conserved”: this is the law of conservation of matter and energy. The second law functions in various ways: energy becomes less available, systems become disorganized, information becomes garbled, matter disintegrates, organisms become extinct, environments decay, stars explode, comets disintegrate, and people get old and die.

Nowhere in the universe is anything getting bigger and better in and of itself. In all human history, no one has ever observed one kind of plant or animal evolve into a higher type. Furthermore, despite all the elaborate theories of stellar evolution, no one has ever observed a star evolve out of interstellar dust, nor one type of star evolve into a different type.

To the human eye, even through a telescope, all stars look simply like points of light, nothing else. Yet astronomers have identified many different kinds of stars; in fact, every single star will apparently plot at a different point on what is called the H-R diagram, on which the star’s brightness is plotted versus its absolute temperature. Yet they all look alike, and they keep looking the same, with their differences determined

solely by their light spectra. The eminent theoretical astrophysicist Stephen W. Hawking has noted:

Stars are so far away that they appear to us to be just pinpoints of light. We cannot see their size or shape. So how can we tell different types of stars apart? For the vast majority of stars, there is only one characteristic feature that we can observe — the color of their light.¹

Evolutionary astronomers have developed involved mathematical theories about how stars form and how they evolve into various kinds of stars, but such theories are, in the very nature of things, impossible even to test. Astronomers have been observing and studying the stars for thousands of years, but they each and all look exactly the same as they did four thousand years ago. Furthermore, they always maintain the same positions relative to one another. Yet astronomers write about stellar evolution just as confidently as though they had observed it happening!

Nothing has been observed to change in the heavens, with one exception. Occasionally, a nova, or even a supernova, appears, making a particular star much brighter than before, for a while. Indications are that each of these represents a stellar explosion, with massive break-up and scattering of the star's contents.

Assuming that that is what they are, such explosions could hardly be called "evolution." Rather, they are specifically in accord with the second law and the creation model. Explosions do not generate order! The same applies to the disintegration of comets and the breakup of asteroids and meteorites. These are changes, but they are *not* evolution.

The same principle applies to the elements of matter also. That is, none of the basic elements evolve naturally into higher elements. Once again, any changes in the chemical elements are downward changes: for example, radioactive decay (e.g., uranium and thorium disintegrating into helium and lead).

In sum, everything that we can actually *observe* in the physical world — whether at the level of giant stars or at the level of the microscopic atom — either stays at the same level of complexity or deteriorates to a lower level. Evolution to a higher level is *never observed to occur anywhere*. In today's world, all present processes and systems explicitly support the predictions of the creation model, whereas they explicitly negate the predictions of the evolution model.

1 Stephen W. Hawking, *A Brief History of Time* (New York: Bantam Books, 1988), p. 37.

All of this does not, of course, *prove* that the creation model of the universe is true and the evolution model is false. What we can say, however, is that if a person *wants* to believe that the universe and all its complexity of systems were supernaturally created, he or she can do so in full confidence that all the *real* data of scientific observation are compatible with that belief.

The Supposed Evolutionary Big Bang

The evolutionary model of cosmic origins, on the other hand, encounters numerous problems. There have been various theories in the past — especially the “steady-state theory” advocated by Fred Hoyle and others — but most of these are currently out of style.

The generally accepted evolutionary explanation for the origin of the universe for some time now has been the so-called “big-bang theory,” which postulates that a primeval atom exploded about 10 to 20 billion years ago, and that molecules, stars, galaxies, and planets all gradually evolved from the expanding gases of this ancient explosion. Furthermore, the complex molecules that developed from the original exploding particles are said to have slowly evolved into living cells and, finally, into human beings!

This “miracle of the big bang,” as British astronomer P.C.W. Davies has called it (though he does not believe in the biblical God, of course), contradicts at least two basic laws of science:

1. The second law of thermodynamics states that “*disorder*” in a closed system must increase with time; the “big-bang” idea, on the other hand, states that the primeval explosion (which would certainly have been the *ultimate* in disorder!) has somehow increased the “*order*” of the whole universe with time.
2. The law of conservation of Angular Momentum states that pure radial motion (in the primeval explosion, all products would move radially outward from its center) cannot give rise to orbital motion; yet planets, stars, and galaxies somehow all managed to start to rotate in vast orbits around different centers throughout the universe.

In spite of these fundamental contradictions, this theory has been accepted by most astronomers and cosmogonists, primarily on the basis of the supposed universal background radiation. This cosmic microwave low temperature radiation was assumed to be uniform in all directions and, therefore, to represent the remnants of the big bang. In addition, the expanding universe theory seems to support the big-bang idea.

Despite its wide acceptance as the standard model of evolutionary cosmogony, however, some of the best astronomers have remained unconvinced. Several of their views will be discussed later. There are many unresolved problems with this “standard model,” as it has been called.

Evolutionists have frequently criticized creationism as unscientific because of its basic commitment to the doctrine of creation *ex nihilo* — that is, “creation out of nothing.” The idea that God simply called the universe into existence by His own power, without using any pre-existing materials, is rejected out of hand by evolutionists, since this would involve supernatural action, which is unscientific by definition (that is, by *their* definition).

Yet now we hear many evolutionary astrophysicists maintaining that the universe “*evolved*” itself out of nothing! Creationists at least assume an adequate Cause to produce the universe: that is, an infinite, omnipotent, omniscient transcendent self-existing personal Creator God. For those who believe in God, creation *ex nihilo* is understandable and reasonable. But even if some people refuse to acknowledge a real Creator, they should realize that a universe evolving out of nothing contradicts the law of cause-and-effect, the principle of conservation of mass/energy, the law of increasing entropy, and the very nature of reason itself. How can they believe such things?

Yet, listen, for example, to Edward P. Tryon, Professor of Physics at the City University of New York, one of the first to propound this idea:

In 1973, I proposed that our Universe had been created spontaneously from nothing (*ex nihilo*), as a result of established principles of physics. This proposal variously struck people as preposterous, enchanting, or both.²

Naturally it would! But a decade later it had become semi-official “scientific” doctrine, and cosmogonists are taking it quite seriously.

For many years, the accepted evolutionary cosmogony has been the big-bang theory. However, there have always been many difficulties with that concept, one of which is to explain how the primeval explosion could be the cause of the complexity and organization of the vast cosmos, and another of which is to explain how a *uniform* explosion could generate such a *non-uniform* universe. Creationists have been emphasizing these problems for years, but now the evolutionists themselves are beginning to recognize them:

2 Edward P. Tryon, “What Made the World?” *New Scientist*, vol. 101 (March 8, 1984), p. 14.

There is no mechanism known as yet that would allow the universe to begin in an arbitrary state and then evolve to its present highly ordered state.³

The cosmological question arises from cosmologists' habit of assuming that the universe is homogeneous. Homogeneity is known to be violated on the small scale by such things as galaxies and ordinary clusters, but cosmologists held out for a large-scale over-all homogeneity. Now if a super cluster can extend halfway around the sky, there doesn't seem too much room left to look for homogeneity.⁴

There are many other difficulties with the big-bang model, but evolutionary theorists have had nothing better to offer, especially since the abandonment of the rival steady-state theory.

Sir Fred Hoyle, outstanding astronomer and cosmologist, who finally gave up the steady-state theory that he had originated and long promoted, has also shown that the big-bang theory should be abandoned for still other reasons:

As a result of all this, the main efforts of investigators have been in papering over holes in the big bang theory, to build up an idea that has become ever more complex and cumbersome. . . . I have little hesitation in saying that a sickly pall now hangs over the big-bang theory. When a pattern of facts becomes set against a theory, experience shows that the theory rarely recovers.⁵

The Inflationary Universe

In a new attempt to overcome some of the difficulties of the big-bang theory, an amazing concept has been promoted, a concept known as the "inflationary universe," associated especially with the name of Alan Guth. This is strictly a mathematical construct, impossible even to visualize, let alone test, but its advocates argue that it can resolve the problems posed by the initial stages of the big bang. Its essentials are outlined in the following inventive scenario:

3 Don H. Page, "Inflation Does Not Explain Time Asymmetry," *Nature*, vol. 304 (July 7, 1983), p. 40.

4 D. E. Thomsen, "Hyper-superduper Galaxy Cluster," *Science News*, vol. 122 (December 18/25, 1982), p. 391.

5 Fred Hoyle, "The Big Bang under Attack," *Science Digest*, vol. 92 (May 1984), p. 84.

Our present understanding now leads us to the belief that sometime around 10^{-35} second the rate of expansion underwent a dramatic, albeit temporary, increase, to which we apply the term *inflation*. The physical processes that took place during the unification of the strong force with the others caused the universe to expand from a size much smaller than a single proton to something approximately the size of a grapefruit in about 10^{-35} second.⁶

Now 10^{-35} second is one hundred-millionth of a billionth of a billionth of a billionth of a second, whatever that can possibly mean. The inflationary cosmogonists are telling us that, at the beginning, the entire universe (of space, time, and matter) was concentrated as an infinitesimal particle, about the size of an electron, with all force systems (gravity, electro-magnetic, nuclear and weak forces) unified as a single type of force.

This “universe” somehow went through an inconceivably rapid inflationary stage, reaching grapefruit size in 10^{-35} second, by which time the four forces had become separate forces, the heterogeneities had been generated that would eventually become expressed in the heterogeneous nature of the expanded universe, and the universe was ready to enter the “normal” phase of its big bang. Thus, as Tryon says, “In this scenario, the ‘hot big bang’ was preceded by a ‘cold big whoosh.’”⁷

To comprehend the arguments behind this inflationary model of the early cosmos, one would require a background in advanced mathematical physics, and not even those who have such a background all accept the model. As the very title of Page’s previously cited article states, inflation does not explain time asymmetry. That is, it still contradicts the principle of increasing entropy, or disorder.

The time asymmetry of the universe is expressed by the second law of thermodynamics, that entropy increases with time as order is transformed into disorder. The mystery is not that an ordered state should become disordered but that the early universe was in a highly ordered state.⁸

Many scientists, of course, have speculated that the universe as a whole has been eternally oscillating back and forth, so that the inferred point-sized beginning of the expanding universe was merely the hypothetical end

6 James Trefil, “The Accidental Universe,” *Science Digest*, vol. 92 (June 1984), p. 54.

7 Tryon, “What Made the World?,” p. 16.

8 Page, “Inflation Does Not Explain Time Asymmetry,” p. 39.

result of a previously contracting universe. But this strange notion is clearly not a solution to the entropy problem.

We now appreciate that, because of the huge entropy generated in our Universe, far from oscillating, a closed universe can only go through one cycle of expansion and contraction. Whether closed or open, reversing or monotonically expanding, the severely irreversible phase transitions transpiring give the universe a definite beginning, middle and end.⁹

In fact, Bludman, who is in the Department of Physics at the University of Pennsylvania, also makes the following fascinating comment:

Finally, we show that if space is closed and the Universe began with low entropy, then it had to begin, not with a hot big bang, but with a non-singular tepid little bang.¹⁰

If the universe is “open,” then its inferred expansion should go on forever; but if it is closed, and eventually begins to fold back in on itself, then it could never bounce back again. It would end in a “final crunch,” says Bludman.

Which brings our discussion back again to the extraordinary beginning assumed by the inflationary model. Where did the initial “point-universe” come from? This amazing point-sized particle that somehow contained the entire universe (including time, as well as space) and, in principle, all its future galaxies, planets, and people — how do we account for *it*? Now, if one thinks that the scenario up to this point has been “enchantly preposterous,” he will surely think the rest of it is simply a creationist plot to make evolutionists look ridiculous! Readers should certainly check this out for themselves.

How did it all come to pass? Edward Tryon, who started many of these metaphysical exercises back in 1973, says:

So I conjectured that our universe had its physical origin as a quantum fluctuation of some pre-existing true vacuum, or state of nothingness.¹¹

9 S. A. Bludman, “Thermodynamics and the End of a Closed Universe,” *Nature*, vol. 308 (March 22, 1984), p. 322.

10 Ibid., p. 319.

11 Tryon, “What Made the World?” p. 15.

So our vast, complex cosmos began as a conjectural point of something or other that evolved as a fluctuation from a state of nothingness!

In this picture, the universe came into existence as a fluctuation in the quantum-mechanical vacuum. Such a hypothesis leads to a view of creation in which the entire universe is an accident. In Tryon's words, "Our universe is simply one of those things which happen from time to time."¹²

Lest any readers begin to wonder, this discussion is not intended as a satire. It is a straightforward recital of what modern astrophysical cosmogonists are proposing as the beginning of our universe. Guth and Steinhardt, two of the most active and ingenious workers in this field, say the following:

From a historical point of view probably the most revolutionary aspect of the inflationary model is the notion that all the matter and energy in the observable universe may have emerged from almost nothing. . . . The inflationary model of the universe provides a possible mechanism by which the observed universe could have evolved from an infinitesimal region. It is then tempting to go one step further and speculate that the entire universe evolved from literally nothing.¹³

Regardless of the sophisticated mathematical calculations leading the inflationary-universe astronomers to their remarkable and fantastic statement of faith in the omnipotence of nothingness, there will continue to be many realists who prefer the creationist alternative.

Problems with the Big Bang

One would gather from reading the articles and books of the current cosmological establishment that all astronomers and cosmologists now accept the big-bang model as essentially proved and indisputable. That is not the case, however.

The standard, hot big bang has many rivals: plasma cosmology, a steady-state universe, a cold big bang, chronometric theory, a universe modeled on fractal geometry. But

12 Trefil, "The Accidental Universe," p. 101.

13 Alan H. Guth and Paul J. Steinhardt, "The Inflationary Universe," *Scientific American*, vol. 250 (May 1984), p. 128.

none of these has inspired the degree of support now accorded the big bang.¹⁴

None of these rival cosmogonies are creationist cosmologies, of course, and they all have serious problems. It is not necessary to discuss them in detail here, since all are evolutionary cosmogonies anyhow. Our contention is that creationism is far superior to any evolutionary sub-model of cosmic origins. The point of referring to them at all is that their advocates are outstanding astronomers themselves, and they have raised serious scientific objections to the dominant big-bang theory.

The big-bang cosmological model has several serious problems, and the inflation hypothesis, which I mentioned before, was brought in to rescue it. When the original inflation model ran into contradictions, it was replaced by a modification called the “new inflation.” When further problems arose, theorists postulated yet another version called “extended inflation.” Some have even advocated adding a second inflationary period — “double inflation.”¹⁵

In all respects save that of convenience, this view of the origin of the Universe is thoroughly unsatisfactory.¹⁶

Big-bang cosmology is probably as widely believed as has been any theory of the universe in the history of Western civilization. It rests, however, on many untested, and in some cases, untestable, assumptions. Indeed, big-bang cosmology has become a bandwagon of thought that reflects faith as much as objective truth. . . . This situation is particularly worrisome because there are good reasons to think the big-bang model is seriously flawed.¹⁷

Such opinions — all by physicists and astronomers very well qualified to express them — could be greatly augmented if necessary. Although they do represent a more or less repressed minority view, there is a

14 Ivars Peterson, “State of the Universe: If Not with a Big Bang, Then What?” *Science News*, vol. 139 (April 13, 1991), p. 235.

15 Robert Oldershaw, “What’s Wrong with the New Physics?” *New Scientist*, vol. 128 (December 22/29, 1990), p. 58.

16 John Maddox, “Down with the Big Bang,” *Nature*, vol. 340 (August 10, 1989), p. 425.

17 Geoffrey Burbidge, “Why Only One Big Bang?” *Scientific American*, vol. 262 (February 1992), p. 120.

significant number of excellent scientists who find the big-bang model scientifically untenable.

Only three evidences of significance are commonly offered in defense of the big-bang concept. One is the supposedly expanding universe, another is the background radiation, the third is the ability of the big bang to account for the origin of hydrogen and helium in the universe. None of these are compelling proofs, however, and all can have alternate explanations.

The expanding universe, for example, implies a primeval particle of space-time from which the expansion presumably began. An expanding universe (even if the concept is valid) in no way eliminates the possibility that the universe could have been *created* in a state of expansion, beginning with any arbitrary size already existing at the instant of creation.

However, it is not at all certain that the universe is really expanding. The evidence for expansion is the famous “red shift,” the shift to the red end of the light spectra from distant galaxies. Some very competent astronomers have argued that the red shift may be caused by other phenomena than receding galaxies.

The central figure in the Red Shift Controversy is Halton Arp, one of the world's finest astronomical observers, who was a staff astronomer at Palomar Observatory for many years and president of the Astronomical Society of the Pacific in the early 1980's. . . . It is the quality of thought embodied in work like his that is necessary to overturn the abomination of the big-bang theory.¹⁸

The critique of Arp and others had to do with the assumption that the amount of red-shift correlates with distance, since the velocity of recession (or expansion) is supposed to be greater for distant galaxies than for those nearby. Galaxies with greater velocities should have retreated to greater distances than those with smaller velocities.

One serious problem with this interpretation of red shifts is that Arp's observations, especially of quasars (quasi-stellar-objects, or QSOs), disagree with it.

Arp says he has observed many objects with red shifts that do not conform to the Hubble relation. He maintains that quasars, for example, whose large red shifts suggest they are the

18 David Cherry, “Redshifts and the Spirit of Scientific Inquiry,” *21st Century* (May/June 1989), p. 35.

most distant objects in the universe, are actually no more distant than galaxies and are probably offshoots of them.¹⁹

That is, quasars are often found so near certain galaxies that they seem to be connected; yet their red shifts are vastly different:

If quasars and the nearby galaxies are connected, the two objects could not be moving at greatly different speeds; more likely their red shifts — and possibly all red shifts — result from something other than a rapid retreat from the earth.²⁰

That being true, then there is no real evidence that the universe is expanding, and, therefore, no evidence that the universe began at the big bang. Still further evidence against the big bang is found in the variable brightness of quasars with the same red shift.

For QSO's however, the diagram shows a wide scatter in apparent brightness at every red shift. In fact, there is little correlation of brightness to red shift at all! Either QSO's come in an extremely wide range of intrinsic luminosities, as most people believe, or their red shifts do not indicate distance.²¹

It is a significant commentary on the American cosmological establishment that Dr. Arp felt himself forced to move to Europe several years ago because he was no longer given access to any suitable telescope for his observations, despite his reputation as an outstanding astronomical observer.

In Europe he has continued to amass impressive evidence against the use of red shifts as an indicator of distance. For example, he was able to show, via six independent lines of evidence, that two galaxies were

19 John Horgan, "Big-Bang Bashers," *Scientific American*, vol. 257 (September 1987), p. 22.

20 Anthony L. Peratt, "Not With a Bang," *The Sciences* (January/February 1990), p. 31.

21 Geoffrey Burbidge and Adelaide Hewith, "A Catalog of Quasars Near and Far," *Sky and Telescope* (December 1994), p. 32. Very recently, Margaret Burbidge (like husband Geoffrey, an astronomer at UCSD) reported to the 1995 meeting of the American Astronomical Society at Pittsburgh that she had discovered two "nearby" quasars, likewise with large redshifts that supposedly should indicate very high velocities and very great distances. The conclusion that redshifts do *not* indicate recession velocities is thereby strengthened, and the big-bang theory further refuted (reported by *San Diego Union Tribune*, June 12, 1995).

interacting with each other, and thus bound to be at the same distance, yet one red shift was six times as great as the other's.²²

In another article, he showed that in our own Milky Way galaxy hot young stars have excessive red shifts and seem to be moving rapidly away in all directions.²³

Both sets of observations, as well as many others published by Dr. Arp over the years, are *completely incompatible* with the expanding-universe idea. Whatever these red shifts mean, they apparently do *not* indicate recession velocities in an expanding universe. It was for just such indications that Arp became *persona non grata* in American observatories. Nevertheless, he is surely one of the world's most competent astronomers, and his many data *do* seem to negate the whole concept of the expanding universe.

Equally important to the big-bang theory is the uniform background radiation, supposedly a remnant from the big-bang explosion. Again, however, there are other explanations possible. Jayant Narlikar, the leading astronomer in India, objects.

Secondly, the microwave background is believed to be the strongest evidence for the big bang. Yet such a fundamental feature as its temperature cannot be deduced from any calculations of the early universe. Its value is assumed.²⁴

Big-bangers claim that basic relativity theory predicts the background radiation. However, the actual very low-level temperature of this radiation (about 3 degrees Kelvin above absolute zero) evidently *cannot* be derived from the theory. Narlikar maintains that an alternate theory, a theory which he and his colleagues are calling the "quasi-steady-state" cosmology, *does* predict it.

In this framework, . . . we can estimate correctly the present temperature of the microwave background.²⁵

The great Swedish astronomer Hannes Alfvén, originator of the "plasma theory" of cosmology, has made an extensive study of this

22 M. Moles, Halton Arp, et al., "Testing for Interaction between the Galaxies NGC450 and UGC807," *Astrophysical Journal*, vol. 432 (1994), p. 135.

23 Halton Arp, "Companion Galaxies: A Test of the Assumption that Velocities can be Inferred from Redshifts," *Astrophysical Journal*, vol. 430 (1994), p. 74. Both articles are cited in *Science Frontiers*, no. 98 (March/April 1995), p. 2.

24 Jayant Narlikar, "Challenge for the Big Bang," *New Scientist*, vol. 138 (June 19, 1993), p. 28.

25 *Ibid.*, p. 29.

radiation, showing that the plasma theory also could account for the temperature of the background radiation, and concludes:

The claim that this radiation lends strong support to hot big cosmologies is without foundation.²⁶

Dartmouth's Robert Oldershaw adds the following information:

The deviations from a single black-body spectrum, the indications of anisotropy, and the fact that the energy density of the microwave background is suspiciously close to that of other non-cosmological phenomena (such as the energy densities of starlight, cosmic ray particles and galactic magnetic fields) all serve to strengthen the hypothesis that this radiation also has a non-primordial astrophysical origin.²⁷

Therefore both the red shift argument and the background-radiation argument are weak arguments, even though they constitute the main arguments for the big bang. The third argument is even weaker. Many years ago, Fred Hoyle and Geoffrey Burbidge (both of whom now reject the big-bang theory) showed that the intense energies of the postulated primordial atom could have generated the hydrogen and helium that are now so abundant in the stellar universe. But Narlikar cautions:

Big-bang cosmology is supposed to explain the origin of most light nuclei. But although it can with some success explain the formation of helium and deuterium, it runs into problems with other nuclei such as lithium, beryllium and boron. Even with deuterium it places such stringent upper limits on how much baryonic matter ("ordinary" matter, in the form of neutrons and protons) is allowed in the Universe that it forces astronomers to suggest that the "dark" matter thought to make up most of the mass is in some exotic form.²⁸

Note also the sharp critique of this "evidence" in a paper co-authored by five eminent astronomers.

26 Hannes Alfvén and Asoka Mendis, "Interpretation of Observed Cosmic Microwave Background Radiation," *Nature*, vol. 266 (April 21, 1977), p. 698.

27 Robert L. Oldershaw, "The Continuing Case for a Hierarchical Cosmology," *Astrophysics and Space*, vol. 92 (1983), p. 356.

28 Narlikar, "Challenge for the Big Bang," p. 28.

It is commonly supposed that the so-called primordial abundance of D, ^3He , He, and ^7Li provide strong evidence for big-bang cosmology. But a particular value for the baryon-to-photon ratio needs to be assumed *ad hoc* to obtain the required abundances. A theory in which results are obtained only through *ad hoc* assumptions can hardly be considered to acquire much merit thereby.²⁹

Therefore, all three primary evidences supposedly “proving” the big-bang theory are badly flawed. Oldershaw says it this way:

In the light of all these problems, it is astounding that the big-bang hypothesis is the only cosmological model that physicists have taken seriously.³⁰

But there are other even more serious problems confronting the big-bang theory. These are very *serious* difficulties, in contrast to the feeble evidences offered to support it.

We have already pointed out its flagrant contradiction with the two laws of thermodynamics, not to mention the law of cause and effect. Cosmologists excuse this conflict merely by reference to the indeterminacy involved in quantum physics, even using this dodge to justify the assumption that our amazing universe just evolved itself out of nothing! Here is yet another commentary on this remarkable statement of faith.

And now to the biggest question of all, where did the universe come from? Or, in modern terminology, what started the big bang? Could quantum fluctuations of empty space have something to do with this as well? Edward Tryon of the City University of New York thought so in 1973 when he proposed that our universe may have originated as a fluctuation of the vacuum on a large scale, as “simply one of those things which happen from time to time.” The idea was later refined and updated within the context of inflationary cosmology by Alexander Vilenkin of Tufts University, who proposed that the universe is created by quantum tunneling from literally nothing

29 Halton C. Arp, Geoffrey Burbidge, Fred Hoyle, Jayant V. Narlikar, and Nandra C. Wickramasinghe, “The Extra-Galactic Universe — an Alternative View,” *Nature*, vol. 346 (August 30, 1990), p. 811.

30 Oldershaw, “Continuing Case for Hierarchical Cosmology,” p. 59.

into the something we call the Universe. Although highly speculative, these models indicate that physicists find themselves turning again to the void and fluctuations therein for their answers.³¹

Theoretical physics must be a captivating profession. Its practitioners need no laboratory, nor any instruments except a computer. They must have great ability in advanced mathematics, of course, and evidently a very unusual outlook on things. They find it impossible to believe in a Creator who could create the universe out of nothing, but have no difficulty in believing in a universe that can evolve *itself* out of nothing!

At any rate, one serious problem encountered by the big-bang concept is the “lumpiness” of the universe, with a very heterogeneous distribution of galaxies in space. Theoretically, the distribution of energy in the big bang and its initial inflationary phase should have been perfectly “smooth” and homogeneous. This fact seemed to have been confirmed by the homogeneity of the background radiation, but as more and more galaxies are discovered, their distribution seems to be less and less uniform. Something is obviously wrong with the theory.

A pressing challenge now is to reconcile the apparent uniformity of the early universe with the lumpy distribution of galaxies in the present universe. Astronomers know that the density of the early universe did not vary by much, because they observe only slight irregularities in the cosmic background radiation.³²

In the past few years astronomers have discovered still larger clumps: huge aggregates of matter that span a billion light years or more, stretching across a substantial fraction of the observable universe. These observations conflict with all current versions of the big bang theory, which do not explain how a smooth explosion could have produced clumps of such size.³³

The discovery of the largest known structure in the Universe could plunge cosmology into crisis. Theorists are going to find it extremely difficult to explain how a long band

31 Harold Puthoff, “Everything for Nothing,” *New Scientist*, vol. 127 (July 28, 1990), p. 55. Puthoff is a theoretical physicist at the Institute for Advanced Studies in Austin, Texas.

32 P.J.E. Peebles et al., “The Evolution of the Universe,” *Scientific American*, vol. 271 (October 1994), p. 57.

33 Eric J. Lerner, “The Big Bang Never Happened,” *Discover*, vol. 9 (June 1988), p. 72.

of quasars stretching hundreds of millions of light years across space could have formed so early in the life of the universe.³⁴

West German and American astronomers recently discovered a super super-cluster nearly two and a half billion light years long; to grow to such a scale under the force of gravity alone would have taken more than 100 billion years, five times longer than our big bang model allows. Furthermore, if the universe turns out to be clumpy on this scale, where is the large-scale uniformity presumed by the big bang?³⁵

In a patch of sky centered roughly on the Southern Cross, astronomers are finding increasing evidence for a "Great Attractor," an enormous accumulation of mass that is perturbing the motion of galaxies for hundreds of millions of light years in every direction. . . . The theorists have been having enough trouble trying to explain the formation of clusters and super clusters of galaxies. The existence of structure on the scale of the Great Attractor may only make the challenge that much tougher.³⁶

It certainly appears that the big bang is in serious trouble. It contradicts the basic laws of science, and it cannot account for the structure of the cosmos that it is presumed to have produced. And now it appears that the evidences traditionally offered in support of the big bang are dissipating, as Peratt points out:

If the red shift is no longer a reliable demonstration of an expanding universe, the big bang model is left without the phenomenon it was invented to explain.³⁷

Also, our five eminent astronomers ironically note:

The commonsense inference . . . from the smoothness of the background is that, so far as microwaves are concerned, we are living in a fog and that the fog is relatively local. A man who falls asleep on the top of a mountain and who wakes in a fog

34 Marcus Chown, "Giant Structure Spells Trouble for Cosmology," *New Scientist*, vol. 129 (February 23, 1991), p. 24.

35 Anthony L. Peratt, "Not with a Bang," *The Sciences* (January/February 1990), p. 27.

36 M. Mitchell Waldrop, "Are We All in the Grip of a Great Attractor?" *Science*, vol. 237 (September 11, 1987), p. 237, 238.

37 Peratt, "Not with a Bang," p. 26.

does not think he is looking at the origin of the Universe. He thinks he is in a fog.³⁸

Cosmic Fantasies

The field of evolutionary cosmology seems to lead its practitioners into ever-deeper excursions into fantasyland, all in the name of science, so-called. Although there is obviously no way that they can actually perform laboratory experiments on cosmic evolution or travel backwards in time to observe it, they still *imagine* that they are using the scientific method.

In science we adopt the plodding route: we accept only what is tested by experiment or observation.³⁹

So they say, writing as if they could actually observe or conduct an experiment on the supposed evolution of the universe!

The lead author of that assertion, Professor Peebles, is also author of a large textbook on all aspects of physical cosmology strongly supporting and expounding the big-bang theory, called by him and others the “standard model.” Yet these authors have to acknowledge:

We do not know why there was a big bang or what may have existed before.⁴⁰

As we have seen, the inflation theory was developed to try to salvage the big-bang theory. That, in turn, has gone through several modifications. In order to escape from causality and thermodynamics, the statistical uncertainties of quantum physics have been called on to justify the fantastically incredible notion that energy and matter, as well as the laws that govern them, somehow evolved in a quantum fluctuation from nothingness!

Then, to keep the universe evolving toward higher and higher states of complexity, various other marvelous new mathematical constructs are invoked. The Australo-British theoretical astrophysicist Paul Davies philosophizes as follows:

As more and more attention is devoted to the study of self-organization and complexity in nature, so it is becoming clear

38 Arp et al., “The Extra-Galactic Universe,” p. 810. It is interesting that only Burbidge is working in America.

39 Peebles et al., “The Evolution of the Universe,” p. 53.

40 Ibid., p. 57.

that there must be new general principles — organizing principles over and above the known laws of physics — which have yet to be discovered. We seem to be on the verge of discovering not only wholly new laws of nature, but ways of thinking about nature that depart radically from traditional science.⁴¹

Very interesting! What about that “plodding route” by which “we accept only what is tested by experiment or observation”? Davies, who has authored more than 20 books, mostly on cosmology, seems to be skirting around some “new-age” concept of cosmic consciousness or something similar. Although he does not believe in the Bible, or in the God of the Bible, he received the 1995 million-dollar Templeton Prize for “Progress in Religion.”

Although he has served many years as professor of theoretical physics at the University of Newcastle-on-Tyne in England and then at the University of Adelaide in Australia, he seems to eschew physics experiments to test his theories.

Logical principles governing organization can be expected to come from the study of fractals, cellular automata, games theory, network theory, complexity theory, catastrophe theory and other computational models of complexity and information. These principles will be in the form of logical rules and theorems that are required on mathematical grounds. They will not refer to specific physical mechanisms for their proof. Consequently they will augment the laws of physics in helping us to describe organizational complexity.⁴²

Another brilliant theoretical cosmologist is Stephen Hawking, professor of theoretical physics at Oxford University, holding the chair once held by Isaac Newton. Severe physical disabilities prevent him from experimental or observational studies, but they have not inhibited his theorizing. In his million-copy best-selling book, he admits:

I was again fortunate in that I chose theoretical physics, because that is all in the mind. So my disability has not been a serious handicap.⁴³

41 Paul Davies, *The Cosmic Blueprint* (New York: Simon and Schuster, 1988), p. 142.

42 Ibid., p. 151.

43 Hawking, *Brief History of Time*, p. vi.

Mind games may be stimulating, but there seems to be no way of verifying them in the highly esoteric field of cosmogony. Hawking, in fact, develops an intricate argument to show that the cosmos is completely self-contained. His conclusion is this:

But if the universe is really completely self-contained, having no boundary or edge, it would have neither beginning nor end: it would simply be. What place, then, for a creator?⁴⁴

Although Hawking's universe has no boundary in either space or time, he does deduce somehow that "space-time" is "finite." Admittedly, the mind of engineering scientists such as the writers' boggles at the concept of finite space without boundaries, and finite time without beginning or end. Relativistic quantum physics seems to be a marvelous mathematical country with only a few citizens.

One of the peculiar aspects of that country is that its inhabitants can postulate the existence of "cold dark matter" which cannot be seen or heard or sensed in any way. It is postulated because it is needed to keep the big-bang model viable. The known universe contains perhaps 10^{25} stars, plus many other measurable entities of matter and energy. But this is not enough to explain the formation of galaxies and galactic clusters, as well as the general clumpiness of the universe. A much greater source of gravitational force is needed, so, therefore, "cold dark matter" is invented.

This invisible stuff is needed to solve various other puzzling aspects of the universe as well. A great deal of it is needed, actually. A commonly cited figure of 90 percent (recently some are saying 99 percent) of the "matter" in the universe must be in the form of "dark matter," to keep the big-bang theory from collapsing.

The problem here is that, despite much searching and theorizing, such matter cannot be found — at least not yet.

To save the basic gravitational mechanism of the big bang itself, astronomers have postulated a variety of exotic but invisible subatomic particles that could fill the interstellar and intergalactic voids with dark but massive amounts of matter.⁴⁵

This "exotic" matter, whatever it is (assuming that it even exists at all, which is extremely doubtful), probably would be insufficient to salvage the big bang.

⁴⁴ Hawking, *Brief History of Time*, p. 140.

⁴⁵ Peratt, "Not with a Bang," p. 26.

Even this *ad hoc* dark matter, however, cannot account for the enormous super clusters of galaxies astronomers have charted in recent years.⁴⁶

Cold dark matter seems unable to explain the structures astronomers observe on the largest scales in the Universe. Hot dark matter, the alternative, has already been ruled out by astronomers.⁴⁷

Most big-bang astronomers also want the universe to be “flat,” as they call it: neither expanding forever, nor destined eventually to collapse back in on itself. But for that, they need more dark matter than is reasonable to hope for.

The universe probably has only a fraction of the mass needed to halt and reverse its expansion, say two astronomers in the U.S. Their finding strikes a blow at the popular inflation theory, which holds that the universe will neither collapse nor expand forever, but instead lies poised on the knife edge between the two.⁴⁸

These astronomers conclude that “no successful MDM (mixed dark matter) can or will be found.”

If so, the universe has less mass than inflation theory predicts, and the theory is wrong.⁴⁹

One writer even speaks of the long band of quasars mentioned earlier as “another nail in the coffin of cold dark matter.”⁵⁰

Other difficulties exist with the big-bang theory, but the point has been made. Far from being a proved fact of science, as many allege, it is probably in its death throes. Various other farfetched theories have been proposed that try to help out, but these are even more speculative.

The inflationary theory has already been mentioned, along with some of its derivatives. One deserves special mention in this section on cosmic fantasies. That is the idea of multiple universes. In a review article, the author notes that certain cosmologists “suggest that spontaneous

46 Ibid., p. 27. Peratt is a physicist at the Los Alamos National Laboratory in New Mexico.

47 Marcus Chown, “Giant Structure Spells Trouble for Cosmology,” *New Scientist*, vol. 129 (February 23, 1991), p. 24.

48 Peter Crowell, “Popular Theory of Cosmology is in Trouble,” *New Scientist*, vol. 142 (April 1994), p. 18.

49 Ibid.

50 Chown, “Giant Structure Spells Trouble,” p. 24.

quantum dynamics may be doing what technology cannot; creating new universes all around us . . . new universes may be constantly coming into existence all around us, spontaneously and invisible . . . it is entirely possible that our own universe came into existence this way.⁵¹

Why not? If evolution can “evolve” one universe into existence, why not many? A Russian cosmophysicist has refined this idea somewhat, suggesting that our universe is perpetually reproducing itself with other universes.

The evolution of inflationary theory has given rise to a completely new cosmological paradigm. . . . In it the universe appears to be both chaotic and homogeneous, expanding and stationary. Our cosmic home grows, fluctuates and eternally reproduces itself in all possible forms, as if adjusting itself for all possible types of life that it can support.⁵²

In this wondrous scenario, the inflationary bubble expands from nothing in an infinitesimal fraction of a second to a size several orders of magnitude greater than the size of the observable universe, all the while reproducing other universes! There is not yet any experimental confirmation, of course, but mathematics and computers and lively imagination can go where mortals cannot.

There are also the “froth theory,” the “string theory,” the “super-string theory,” and others, all presumably refinements of the big-bang theory. Robert Oldershaw of Dartmouth University is one of many who remain skeptical.

During the past decade or so, two worrying trends have emerged in the two areas of physics that claim to explain the nature of everything — particle physics and cosmology. The first trend is that physicists are increasingly devising mathematically elegant hypotheses which they say are “compelling” but which nevertheless cannot be verified by experiments or observations. The second trend is that theorists are becoming reluctant to give up their elegant notions, preferring to modify the theory rather than discard it, even when observations do not support it.⁵³

51 M. Mitchell Waldrop, “Do-it-Yourself Universes,” *Science*, vol. 235 (February 20, 1987), p. 845, 846.

52 Andrei Linde, “The Self-Reproducing Inflationary Universe,” *Scientific American*, vol. 271 (November 1994), p. 55.

53 Robert Oldershaw, “What’s Wrong with the New Physics?” *New Scientist*, vol. 128 (December 22/29, 1990), p. 56.

One reason for the plethora of cosmological theories continually appearing in the media is the very fact that cosmology must rely only on mathematics and computer simulations, actual experimentation being impossible. Oldershaw goes on to cite some examples:

A lot of effort has been diverted into string theory, yet it has not led to a single prediction. In addition to these well-known theories, there are many other hypotheses of the “new physics” that suffer from a lack of testable predictions. Some that come to mind are the existence of “hidden dimensions,” “shadow matter,” “wormholes in space-time,” and the “many worlds” interpretation of quantum mechanics.⁵⁴

One might hesitantly add “black holes,” “white holes,” “anti-matter” and other esoteric concepts to such a list. Some would say, of course, that black holes have actually been observed, but there are not many, if any.

That brings the number of serious black hole candidates to four, the candidates for extra-galactic black holes to one.⁵⁵

No serious candidates for “white holes” have been proposed, and one hears very little about “anti-matter” these days.

As noted earlier, a significant number of cosmologists are seriously promoting alternative cosmologies to the big bang. These generally assume an eternal universe, without beginning and without end, yet continually evolving.

One is the “quasi-steady-state cosmology” recently put forth by Halton Arp, Fred Hoyle, and others. Another is the “plasma universe,” proposed by Hannes Alfvén and others. Like Arp and Hoyle, Hannes Alfvén (who was a Nobel Prize winner in 1970) has found it almost impossible to get papers on cosmology published in the establishment journals ever since he repudiated the big bang!

Advocates of both these theories maintain that they can incorporate the evidences of the big bang (red shifts, background radiation, light-element genesis) into their theories, as well as avoiding its problems. Whether this is so remains doubtful; the big-bang cosmologists, who still constitute the great majority, certainly don't think so.

⁵⁴ Ibid., p. 57.

⁵⁵ Barry Parker, “Where Have All the Black Holes Gone?” *Astronomy*, vol. 22 (October 1994), p. 39.

To the creationist, all such theories — especially these eternal-universe theories — deny the very existence of a Creator and are, therefore, evolutionary theories of the same genre basically as the big bang. Sometimes the steady-state-theory (or, now, the quasi-steady-state-theory) is called the “continuous creation” theory, but a more realistic term would be the “continuous-*ex nihilo*-evolution” theory.

A number of theists have even tried to correlate the big bang with creationism, arguing that the “big bang” itself (or the “quantum fluctuation from the primeval nothingness”) was *the* act of special creation that brought the universe into being. While this concept may correlate with new-age pantheistic evolution (as well as with non-theistic evolution), it should not be called *special creation*. Paul Davies, who is himself a religionist of sorts, refutes any such notion.

When the big-bang theory became popular in the 1950s, many people used it to support the belief that the universe was created by God at some specific moment in the past. And some still regard the big bang as “the creation” — a divine act to be left beyond the scope of science. . . . However, this sort of armchair theology is wide of the mark. The popular idea of a God who sets the universe going like a clockwork toy and then sits back to watch was ditched by the Church in the last century.⁵⁶

Such theists need to remember that the big bang theory was not really a discovery of modern science, but essentially just an attempt to extend naturalism back to the very beginning by trying to explain even the origin of the universe without God. To impose God on a system that works *without Him* makes the special-creation idea altogether redundant.

Stephen Hawking has an interesting comment in this connection. He was invited to speak at a Papal conference on science, and then he had an audience with the pope.

[The pope] told us that it was all right to study the evolution of the universe after the big bang, but we should not inquire into the big bang itself because that was the moment of creation and therefore the work of God. I was glad then that he did not know the subject of the talk I had just given at the conference — the possibility that space-time was finite but had

⁵⁶ Paul Davies, “What Hath COBE Wrought?” *Sky and Telescope* (January 1993), p. 4.

no boundary, which means that it had no beginning, no moment of creation.⁵⁷

The creation model of origins, as applied to the universe itself, in no way harmonizes with the big bang or any other theory of evolutionary cosmology. The universe was created supernaturally in a period of special creation at the beginning, by an omnipotent and transcendent Creator, a universe fully functioning, perfect and complete, right from the start. As noted at the beginning of this chapter, such a creation fits perfectly and scientifically with the whole universe, just as it is.

Mysteries of the Heavenly Bodies

Evolutionary astronomers have developed elaborate theories of the evolution of all the stars and other bodies in the universe, making it all sound very pat, just as though they had observed it happening. All follows from the big bang, however, and since the big bang is a badly flawed theory, all of these sub-theories are brought in question, too. In addition, each has its own problems. The standard model goes something like this:

Matter in the universe was born in violence. Hydrogen and helium emerged from the intense heat of the big bang some 15 billion years ago. More elaborate atoms of carbon, oxygen, calcium and iron, out of which we are made, had their origins in the burning depths of stars. Heavy elements such as uranium were synthesized in the shock waves of supernova explosions. The nuclear processes that created these ingredients of life took place in the most inhospitable of environments.⁵⁸

The composition of the earth is the natural by-product of energy generation in stars and successive waves of stellar birth and death in our galaxy.⁵⁹

Just how the stars were formed from the big-bang explosion, however, remains a mystery. The big bang generated hydrogen and helium, they say, and the higher elements were generated later in the interiors of stars. But where did those stars come from? Presumably, they were composed of hydrogen and helium atoms that were somehow pulled together by gravity as they were rushing apart with the expanding universe.

57 Hawking, *Brief History of Time*, p. 116.

58 Robert P. Kirshner, "The Earth's Elements," *Scientific American*, vol. 271 (October 1994), p. 59.

59 *Ibid.*, p. 65.

If so, where are they now? All of the stars whose spectra have been observed already have metallic elements in them.

A recent paper by Cavrel adds an interesting twist to speculation on the whereabouts of those most elusive of astronomical objects, Population III stars. These are the stars of zero metallicity which must have formed before the Population I stars in galactic disks and Population II stars in galactic halos. The existence of such stars is inevitable because metals can be made only by stars themselves (unlike some of the lighter elements, such as helium and deuterium, which are produced through cosmological nucleosynthesis in the big bang). Thus the first stars must have contained no metals at all. . . . The problem is that despite extensive searches, nobody has ever found a zero-metallicity star.⁶⁰

Stars are supposedly still coming into existence, accumulating by condensation out of interstellar gas. The Orion nebula has often been acclaimed as the classic example of protostars in the process of becoming stars, because of its unusual brightness and visible gas clouds. There seems to be a problem, however, even in this prized example.

The discovery that at least some of the infrared sources once thought to be protostars are more probably very young, massive stars dramatically shedding mass has some important implications for the understanding of how new stars form. First of all, it means astronomers may have to start afresh for the precursors of typical main sequence stars. Second, the wind from a large luminous star may have a strong influence, either positive or negative, on the creation of smaller stars, such as those resembling the sun. On the one hand, the wind could so badly disrupt the cloud surrounding it that further star formation would be impossible. On the other hand the pressure of wind on the neighboring parts of the cloud could promote the collapse of further fragments. Third, if a strong wind is a feature of the early evolution of all stars, not just massive ones, it could adversely influence the formation of planetary systems.⁶¹

60 Bernard Carr, "Where is Population III?" *Nature*, vol. 326 (April 30, 1987), p. 829.

61 Gareth Wynn-Williams, "The Newest Stars in Orion," *Scientific American*, vol. 245 (August 1981), p. 55.

From the above description of the “protostars” in the glorious Orion nebula, supposedly the best example of new stars forming, these protostars are doing more *breaking up* than *building up*. The high outward and/or tangential pressures of the stellar winds would very likely overpower the inward pull of gravity. Stars can disintegrate more easily than they can form, it seems. Although there are various theories of stellar formation and evolution, there is little true knowledge.

Nobody really understands how star formation proceeds; it's really remarkable.⁶²

It is also a bit disturbing that all these estimates of the ages and composition of the stars rest on elaborate calculations of what is going on inside them, but all that we observe is the light emitted from their surfaces.⁶³

Consequently, there is very little real understanding of how stars could ever have evolved from gas clouds. There is even less understanding of how galaxies and galactic clusters form.

Among the most important relics are the structures we see in the sky: many stars are grouped into clusters, and clusters themselves along with loose stars like our sun are grouped into galaxies, and the galaxies themselves are grouped into clusters of galaxies. . . . We do not even know whether the smaller structures formed first and then coalesced into the larger ones, or whether the large ones formed first and then broke up into the smaller ones.⁶⁴

Now, in the 1990s we can still say that we are only on the verge of understanding how galaxies are born, how they work, and what roles they play in the universe at large. . . . The process by which galaxies clump together poses a significant mystery for astronomers.⁶⁵

The situation with respect to such esoteric objects as quasars and black holes is even more uncertain:

62 Roger A. Windhorst, as quoted in Corey S. Power, “A Matter of Timing,” *Scientific American*, vol. 269 (October 1992), p. 30. Windhorst is an astronomer at Arizona State University.

63 Steven Weinberg, “Origins,” *Science*, vol. 230 (October 4, 1985), p. 16.

64 Ibid.

65 Jay Gallagher and Jean Keppel, “Seven Mysteries of Galaxies,” *Astronomy*, vol. 22 (March 1994), p. 39, 41.

We see [quasars] today as the earliest sign-posts of galaxy-sized objects. But what happened in the time between the appearance of the cosmic background radiation and the first quasars? So far astronomers have no observations of this lengthy period.⁶⁶

Proving the existence of black holes continues to be one of the hot areas of astronomical research.⁶⁷

It doesn't get any easier when it comes down to the origin of planets. The sample is not large, of course, since the only *known* planets are those in our own solar system. And the problem here is that they are all different from each other.

The solar system used to be a simple place. . . . But 30 years of planetary exploration have replaced that simple picture with a far more complex image. "The most striking outcome of planetary exploration is the diversity of the planets," says planetary physicist David Stevenson of the California Institute of Technology. Ross Taylor of the Australian National University agrees: "If you look at all the planets and the 60 or so satellites, it's very hard to find two that are the same."⁶⁸

As a result, all the old theories of the evolution of the earth and the solar system (the nebular hypothesis, the tidal theory, etc.) have just about been abandoned, and the whole subject is now open.

The challenge will be to understand how, as Stevenson puts it, "you can start out with similar starting materials and end up with different planets." Stevenson and others are puzzling out how subtle differences in starting conditions such as distance from the sun, along with chance events like giant impacts early in solar system history, can send planets down vastly different evolutionary paths.⁶⁹

Even the earth's moon is still of unknown origin, despite NASA's various *Apollo* missions. Since all the older theories have had to be

66 Jay Gallagher and Jean Keppel, "Seven Mysteries of Galaxies," *Astronomy*, vol. 22 (March 1994), p. 40.

67 *Ibid.*, p. 44.

68 Richard A. Kerr, "The Solar System's New Diversity," *Science*, vol. 265 (September 2, 1994), p. 1360.

69 *Ibid.*

abandoned, the planetary scientists are turning to catastrophism: that is, sudden ejection of the moon from the earth by a planet-sized object of some kind. Not only so, but the various planets and their respective satellites are believed now each to require a similar catastrophic type of origin. This type of approach to a geological explanation has been diligently eschewed in the past, but the times are changing!

Unique events are difficult to accommodate in most scientific disciplines. The solar system, however, is not uniform. All nine planets (even such apparent twins as the earth and Venus) are different in detail from one another. . . . The planets all possess varying obliquities; the most extreme example is Uranus, lying on its side with its pole pointing toward the sun, probably the consequence of collision with an earth-sized body. In contrast to the earth, Venus rotates slightly backward, has a low magnetic field, no oceans, a thick atmosphere mainly of carbon dioxide, and no moon. All this diversity makes the occurrence of single events more probable in the early stages of the history of the solar system. Thus a giant collision with the earth becomes a reasonable possibility for the origin of the moon.⁷⁰

The physical and chemical composition of the moon is very different from that of the earth, however, and it is difficult to see how the moon could have come from the earth, even as the result of such a hypothetical giant collision. Though the impact explanation is currently favored — for lack of anything better — it is surely not a very good one.

In astronomical terms, therefore, the Moon must be classed as a well-known object, but astronomers still have to admit shamefacedly that they have little idea where it came from. . . . “Where did the moon come from?” is still an open and challenging question.⁷¹

If this is a problem with respect to the moon, from which our astronauts have brought back many measurements and samples, then it is a *far greater problem* with respect to the 9 planets and 60 satellites, which differ far more widely from each other than do the earth and the moon.

70 Stuart Ross Taylor, “The Origin of the Moon,” *American Scientist*, vol. 75 (September/October 1987), p. 477.

71 David W. Hughes, “The Open Question in Selenology,” *Nature*, vol. 327 (May 22, 1987), p. 291.

How could they all be so different in composition and motion, being all associated with the same sun and all presumably about the same age? It would seem that no naturalistic explanation makes sense, even in the absurdly unlikely happenstance of 70 different giant planetesimals striking them some time in the past.

Well, when all else fails, perhaps the evolutionists will try creation. The creation model may go against the psychological grain of establishment scientists, but it does fit all the facts. We may not know *why* each planet and satellite was created so uniquely, but “why” questions are theological. This book seeks to deal only with the scientific evidence, and *that* supports creation.

Chapter 9

The Circumstantial Evidences Say No to Evolution

Since long before Darwin published his famous book, and before anything of consequence was known about paleontology, genetics, or thermodynamics, evolutionists were speaking of what they thought were circumstantial evidences of evolution. They cited the features of comparative anatomy and physiology, the assumed recapitulation theory of embryology, the geographical distribution of plants and animals, the vestiges of once-useful organs, the classification hierarchy, and other such superficial evidences to defend their faith in evolution.

Vestigial Organs — Useful After All

Some of these “evidences” have long since been disproved, though introductory textbooks often still use them. The argument based on vestigial organs, for example, lost all its persuasive power when it was finally realized that practically all such organs have specific uses, and were not mere atrophied remnants of once-useful organs.

S. R. Scadding of Guelph University, in an important paper reviewed by Stephen Jay Gould, essentially settled this argument once and for all. He reviewed the famous list of vestigial organs in man, originally published by the German anatomist R. Wiedersheim in 1895, who in turn had updated and extended the list originally cited by Darwin, Haeckel, and other early evolutionists.

He first noted that this was never really a scientific argument, since it was essentially based on ignorance, and was supposedly a testimony

against God, who (if He existed) would surely not have created useless organs.

The vestigial organ argument is essentially a theological argument rather than a scientific argument.¹

Then, after discussing the various categories of these supposed vestigial organs and concluding that practically all have at least minor functions at some time during life, as well as the impossibility of proving that any such organ or structure *never* had any function at all, he said:

As our knowledge has increased, the list of vestigial structures has decreased. Wiedersheim could list about one hundred in humans; recent authors list four or five. Even the current short list of vestigial structures in humans is questionable. Anatomically, the appendix shows evidence of a lymphoid function. . . . The coccyx serves as a point of insertion for several muscles and ligaments. . . . The semi-lunar fold of the eye . . . aids in the cleaning and lubrication of the eye ball.²

Since it is not possible to unambiguously identify useless structures, and since the structure of the argument used is not scientifically valid, I conclude that “vestigial organs” provide no special evidence for the theory of evolution.³

It is interesting that Gould has endorsed Scadding’s analysis and conclusions, yet he has used a very similar type of argument when he cites “imperfections,” such as the panda’s thumb, as evidence for evolution. As discussed in chapter 2, this also is an argument from ignorance, at best, for the panda’s thumb is beautifully adapted to the panda’s uses in its own environment. The same would apply to the more recent argument based on what are called “pseudogenes” — mutant genes that presumably have no current purpose. These will be discussed later in this chapter.

Furthermore, even if this type of argument were scientifically valid, it would not be sound theologically, as Darwin and Haeckel thought. The fact that the Creator would make each structure “perfect” for its intended use in the beginning does not mean that it would stay that way forever. Any organ or structure or gene that once was useful and has now lost its

1 S. R. Scadding, “Do ‘Vestigial Organs’ Provide Evidence for Evolution?” *Evolutionary Theory*, vol. 5 (May 1981), p. 173.

2 Ibid., p. 175.

3 Ibid., p. 176.

usefulness is simply an illustration of the creation model, which predicts that any “vertical change” will be downward, rather than upward. Evolutionists should (but probably won’t) abandon this entire *type* of argument.

Evidence from Embryos

Another discredited evidence for evolution is the hoary “recapitulation theory” that “ontogeny recapitulates phylogeny”: that is, that the development of the embryo from conception to birth recapitulates the evolutionary history of the species. Thus, the human conceptus or embryo was said to begin life as a one-celled animal in a liquid environment, developing then into a multi-celled invertebrate, into a fish with gill-slits, from there into an amphibian with a three-chambered heart, after that, into a monkey with a tail, and, finally — toward the beginning of the third trimester — into a human being.

This idea antedated Charles Darwin, originating in the ancient pantheistic philosophy of the “great chain of being,” but was said by Darwin to be probably the main evidence for macro-evolution. It was especially popularized by the German biologist Ernst Haeckel, who later even was found guilty of “schematizing” his drawings of embryonic development, to make it appear as though the embryos of human beings looked just like those of rabbits, horses, and other animals, until well along in their development.

That idea has long been disproved, of course, although many evolutionists (including even some textbook writers and evolutionist debaters) continue to use it in an effort to convince people to accept evolution. Embryologic researchers have shown conclusively that the embryo never has gill-slits or a tail or any of the supposed evolutionary recapitulations at all. It is programmed — via the genetic code in the DNA molecules — to develop into a human being right from the start, and every stage in its development is essential to reaching that goal. A science writer reviewing the papers presented at an important 1981 Berlin conference on embryology noted the following:

Drawing parallels between development and evolution was much in vogue a century ago — as captured in the tongue-twisting slogan still memorized by students, “Ontogeny recapitulates phylogeny.” But interest shifted away from development in the period following the widespread acceptance of Darwin’s theory of evolution.⁴

⁴ Julie Ann Miller, “Return of the Embryo,” *Science News*, vol. 120 (July 4, 1981), p. 12.

The reporter did not mention the real reason for this shift of opinion. The fact is that the theory had been proved false! Even Gould, who is trying to restore interest in embryology as important in understanding evolution, said that the recapitulation theory “should be defunct today.”⁵

The reason that Gould (who has even written a book entitled *Ontogeny and Phylogeny*), and the 50 other biologists at the Berlin conference were trying to develop renewed interest in embryology was that the punctuated equilibrium theorists are desperately searching for some kind of mechanism that can explain sudden evolutionary spurts after thousands of generations of stasis, and they hope that the secret may be found somewhere in the embryo.

The philosophical shift that has renewed interest in embryology is a concern for large and relatively sudden changes that take place in evolution. . . . And the major changes, which can create a new species, all crowd into a relatively short period. Then the discontinuous change creates a “hopeful monster,” which can adapt to a new mode of life. . . . changes in an organism’s development can be amplified into a major difference in the adult.⁶

Or so they hoped! However, neither the conference papers nor the 15 or so years of study after the conference have solved the problem.

Raising questions rather than answering them was the stated intention of the meeting. In that it certainly succeeded.⁷

Embryological evidences or mechanisms for evolution should be considered a dead end. Manipulating genes or embryos normally will produce defective offspring, if anything, that would never survive in nature — let alone produce an evolutionary advance of any kind. This has been abundantly verified in countless experiments on fruit flies, over many decades. These poor little animals have been bombarded with radiations, chemicals, and other mutagenic agents, and many “monsters” have been generated: flies with misplaced legs, extra wings instead of the balancing organs, missing thorax segments, and other grotesque changes.

5 Stephen Jay Gould, “Dr. Down’s Syndrome,” *Natural History*, vol. 89 (April 1980), p. 144.

6 Miller, “Return of the Embryo,” p. 12.

7 Ibid., p. 14.

Not one of these victims was a “*hopeful monster*,” however. All these “homeotic mutants,” as such mutations are called, are either lethal, harmful, or neutral, at best. Such changes, however, are in accord with the universal law of entropy, and with the requirements of the creation model. They could never produce real evolution to a higher type.

The Witness of Biogeography

For some reason, the geographical distribution of animals and plants is often cited (and has been, since before Darwin’s time) as an evidence of evolution. It has always been obvious, to both creationists and evolutionists, that different regions or habitats tend to support their own distinctive faunas and floras.

That does not mean that they must have *evolved* there, however. There has been in the past, and is at present, a great amount of migration when habitats or environments change. This could well have been the case even if all species had been specially created at the same spot on earth at one particular time in the past. If that were the case, it would not have taken many generations before population pressures and availability of many varieties of ecological niches around the world would have induced migration to just those habitats where each species is now found.

It is not at all obvious, therefore, how either past or present geographical distributions of animals can be used legitimately to differentiate between evolution of the species *in situ*, or migration from their point of origin. Marsupials, for example, even now are found not only in Australia, as some seem to think. Fossils of marsupials have also been discovered in several continents.

That seems true of fossils in general, as a matter of fact. The most famous fossil animal of all, the dinosaur, has been found in abundance *on every continent*.

Nevertheless, evolutionists have used geographical distribution as one of their arguments. Marjorie Grene, an eminent philosopher of science, confirms this, but also notes the importance of dispersal in understanding biogeography:

Geographical distribution was one of the classic supports for descent with modification. . . . But birds do fly and so . . . do fishes swim. Why *no* dispersal, ever? Among, for example, North and South American fauna or Hawaiian *drosophila* it seems pretty well established.⁸

8 Marjorie Grene, “Is Evolution at a Crossroads?” Chapter 2 in *Evolutionary Biology*, ed. Max K. Hecht, Bruce Wallace, and Ross J. MacIntire, vol. 24 (1991), p. 70.

In the context, Professor Grene was defending neo-Darwinism against punctuationism, but her defense could just as well apply to creation with subsequent dispersion. Dispersion may or may not have been aided, or inhibited, by continental splitting and drifting; but again there would be no difference between creationist and evolutionist explanations for any animal distribution caused thereby.

The main argument for evolution as related to geographical distribution seems limited to microevolution, the most widely mentioned example being "Darwin's finches."

As observed by Charles Darwin on his travels along the western coast of South America, there were different species of finches in the various Galapagos Islands off the coast. He argued that these different species (with different beak sizes and shapes as the main difference) had migrated from South America, and then each had evolved in an appropriate way to survive in the particular ecological habitat of each different island.

Creationists would probably explain the differences in the finches in essentially the same way, except that they would call the process "variation" or "recombination," instead of either "evolution" or even "microevolution." The finches are all still finches, with all probably inter-fertile with each other. The original finches were created with a genetic variation potential (like the famous peppered moth of England, already discussed) that would enable them to adapt to the different habitats as various groups from the mainland reached the various islands from time to time. However, this is not evolution, but variation, or possibly even speciation (depending on definition).

Detailed attempts to study how even this much change could take place have not been easy. A biology professor at the University of Michigan, after detailed study, concluded:

There is a need for further research into the affinities of Darwin's finches with Central and South American species to solve the enigma of the phylogenetic origin of the finches.⁹

In any case, the changes took place very quickly, at least as geologists view time.

Evidently the evolutionary radiation took place fairly rapidly in geological time, for the Galapagos are no more than three to five million years old.¹⁰

⁹ Peter R. Grant, "Speciation and the Adaptive Radiation of Darwin's Finches," *American Scientist*, vol. 69 (November/December 1981), p. 661.

¹⁰ *Ibid.*, p. 655.

As a matter of fact, it has been found in recent years that such variation in the finches can take place in just a very few years, as in the case of the peppered moth or in pesticide-resistant insects. The finches are all still inter-fertile, and so continue to constitute one species. Each variety is able to adjust its behavior and breeding habits whenever environmental changes necessitate.

In any event, the finches are all still of the finch type, with the ability to vary expeditiously and adjust to a change of habitat, thereby providing another confirmation of the “conservation” stipulation of the creation model.

The Insignificance of Similarities

A long-cherished “evidence” of evolution has been the study of comparative anatomy and physiology, or simply, comparative morphology.

We could add the study of comparative embryology, calling the entire argument the evidence from similarities. Men look more like apes than elephants, which proves that they are more closely related to apes than to elephants, so goes the argument.

A common ploy is to note what are called “homologies.” For example, the human arm is “homologous” to the forelimb of a horse, the wing of a bat, and the flipper of a dolphin. This fact is supposed to show that they all had a common ancestor.

No, it doesn’t! It simply shows that man had need for his arm, the horse needed a strong fore leg, the bat needed strength to power his wings, and the dolphin needed to swim. The respective structures were all designed by the same Creator, who used a similar basic plan for each, with special variations to accommodate the specific needs.

This argument from homologous structures might possibly be explained by evolution from a common ancestor, but is much more naturally explained as design by a common Designer, with the ability to vary His design to meet particular environmental needs.

Sometimes these similarities, which are always easily explained by creation, become very difficult to explain by the evolutionist. He often then falls back on a semantic device called “convergent evolution.” For example, consider the wing. Insects have wings, birds have wings, some reptiles had wings (e.g., the extinct pterosaur), and some mammals (i.e., bats) have wings. All these animals were designed to fly, but evolutionists have to assume that a structure intended for flight evolved along *four*

completely separate pathways, finally “converging” on structures that look homologous, but are not!

Another example is the amazing organ called the eye. Fish and people both have eyes, not because they both came from a common ancestor, but because both have to see, so the Creator made eyes for them. But squids also have eyes, and the extinct trilobites had very remarkable eyes. So do butterflies! People did *not* inherit their eyes from marine invertebrates, however, and all evolutionists would agree that they didn’t. Instead, they call such similarity of results “convergence.”

In any case, the differences are far more significant than the similarities. No one has any problem distinguishing a man from a gorilla, yet evolutionists believe that the two came rather recently from a common ancestor. To the extent that similarities of form really relate to similarity of function, they can surely be explained just as well by creation by the same Creator, who would certainly be justified in creating similar structures for similar functions.

Sir Gavin de Beer noted another problem with the argument from homologies. He listed a number of cases in which structures that had very similar or identical functions in different animals, were nevertheless coded by altogether different genes and chromosomes.

It is now clear that the pride with which it was assumed that the inheritance of homologous structures from a common ancestor explained homology was misplaced.¹¹

A journal founded for the specific purpose of fighting creationism carried an article several years ago by a scientist with the National Institutes of Health in Maryland. The scientist, Edward E. Max, M.D., Ph.D., made an important admission concerning this old argument from similarities.

Thus, the similarities between species in anatomy and protein structure can be interpreted in two entirely different ways. The evolutionists say that the similarity between features of, for example, humans and apes reflects the fact that these features were “copied” from a common ancestor; the creationists say that the two species were created independently but were designed with similar features so that they would function

¹¹ Gavin De Beer, *Homology an Unsolved Problem* (London: Oxford University Press, 1971), p. 15.

similarly. Both views seem consistent with the similarity data, but which view is correct?¹²

This author, of course, believes that evolution is correct, but he does acknowledge that the similarity data can be explained just as well by creation as by evolution. His own argument is based on “errors” in “pseudogenes.”

Before discussing this particular argument, however, we first need to consider the supposed evidence from similarities in protein structure to which Dr. Max makes reference. These particular similarities have been widely used in recent years as a means not only of arguing against creation, but also as a means of constructing evolutionary family trees and even evolutionary chronologies.

In the meantime, the reader should keep in mind the fact that, while either creation or evolution can explain the *similarities*, only creation can explain the *differences*!

Chaotic Genetics

Since the old ideas of small, random point mutations have proven inadequate to explain evolution — and genetic mutations are now needed that will produce hopeful monsters or other large changes — the field of genetics has proliferated in all sorts of strange directions. Instead of the old Mendelian concept of a specific gene for each physical characteristic, modern molecular biology has introduced an amazing assortment of genes into the literature. There are structural genes, regulatory genes, selfish genes, coding genes, junk genes, split genes, pseudogenes, processed genes, jumping genes, repeating genes, satellite genes, converted genes, and various others.

Each functional gene affects many characteristics; every characteristic is affected by many genes, but most genes (superficially) seem to do nothing at all. Many gene sequences repeat themselves in various organisms, and in most cases the function of these repeating sequences is quite unknown. Then there are the DNA molecules, the RNA, and various other components of the cell, all playing various key roles in heredity, but all still very imperfectly understood.

This is hardly an appropriate place to try to discuss all these terms and concepts. Even specialists in molecular biology are still trying to sort them out. A little seems to be known about many things, but not much is known about anything specific in this unique field of study.

12 Edward E. Max, “Plagiarized Errors and Molecular Genetics: Another Argument in the Evolution-Creation Controversy,” *Creation/Evolution*, vol. 19 (1986), p. 36.

The all-pervading message of the Cambridge meeting was that genomic DNA is a surprisingly dynamic state. . . . The most obvious comment to make about the genomes of higher organisms is that biologists understand the function of only a tiny proportion of the DNA in them.¹³

Obviously, it is hoped that this mysterious world of molecular biology will eventually provide desperately needed answers (needed by evolutionists, that is) as to what causes evolution. It must be embarrassing to be certain that evolution is true, and yet to have no idea how it works!

A great amount of money, possibly over three billion dollars per year, is being devoted to molecular biology, so evolutionists are hopeful that an explanation will one day be forthcoming.

But it hasn't yet! Creationists are amazed at the strong faith exercised by evolutionists. Over a century of intensive research into mechanisms of biologic change has still failed to turn up a plausible genetic model to explain evolution. Evolution is supposed to be an all-pervading process, still actively going on, yet no one has ever seen it happen, there are no evolutionary transitions recorded in the fossils, and no known genetic mechanism is capable of producing it. Yet evolutionists repeatedly insist that evolution is a proven fact of science! This is an amazing commentary on human nature in its perverse attempt to get rid of God.

However, genetic studies have provided a new set of data that evolutionists have started using again in recent years as an evidence for evolution. With the increasing recognition that the fossil record, as well as the mutation/selection mechanism of neo-Darwinism, really constitutes an argument *against* evolution instead of *for* evolution, a new line of evidence was urgently needed. Apparently, the best that they could come up with is the supposed hierarchical arrays of various proteins in different organisms, which are supposed to correspond to the chronological histories of their respective times of divergence from the common ancestral line. This is the so-called evidence from molecular homology.

For example, it is commonly asserted now that man and the chimpanzee must be very closely related because they are said to share 99 percent of their functional DNA. Similarly, the chimpanzee is allegedly man's closest relative based on hemoglobin similarities. By

13 Roger Lewin, "Do Jumping Genes Make Evolutionary Leaps?" *Science*, vol. 213 (August 7, 1981), p. 634.

such comparison, it is asserted that a complete evolutionary family tree can be derived between man and all other organisms, with the time of divergence of each from the ancestral stock actually constituting a “molecular clock,” which can even be used to give absolute dates by calibrating against radiometric ages. It is even alleged that the same evolutionary relationships are obtained from most other proteins in the various organisms, and that these all correspond to the paleontological record as well.

Now even if this were all true, it certainly would not prove evolution. This is nothing more nor less than the old argument from similarities, or comparative morphology. One of the traditional arguments for evolution has always been that of similarities: similarities in anatomy, similarities in embryology, etc. But that, of course, proves nothing. Similarities indicate a common designer *at least as much* as they indicate a common ancestor. Why is it surprising that chimpanzee DNA should be very similar to human DNA? The entire structure of chimpanzees is far more similar to that of humans than it is, for example, to that of fishes or scorpions.

The DNA, for that matter, even though it seems to carry the genetic information for all organisms, is mostly of uncertain function.

In the human genome, for instance, these protein-coding genes constitute marginally more than one percent of all the DNA. The rest of the genome is the target of much speculation, but few secure answers.¹⁴

It would seem that, if the function of 99 percent of human DNA is unknown (more recent writers say 97 percent), the fact that 99 percent of the 1 to 3 percent of human DNA that *is* known corresponds to chimpanzee DNA really proves very little. It is only the, say three percent, difference, apparently, that does all the coding (if, indeed, the DNA is really responsible for all such genetic coding, a proposition that has never been satisfactorily demonstrated).

Furthermore, the supposed similarities have been much overrated. Blood proteins and cytochrome C are two types of proteins that have often been cited as supporting the imaginary evolutionary hierarchy. Yet, note the following evaluations of these two systems by two eminent biologists:

If blood proteins are a representative sample of proteins coded by structural genes, the most similar species should have

¹⁴ Ibid.

the most similar blood proteins. Wilson (Univ. Calif. of Berkeley) and his colleagues found, however, that structural genes for blood proteins accumulate mutations at rates that appear independent of anatomical evolution. . . . It thus seems evident that the old method of comparing proteins of different species may no longer be the primary tool for investigating the mechanisms underlying the evolution of organisms.¹⁵

The cytochrome c of man differs by 14 amino acids from that of the horse, and by only 8 from that of the kangaroo. Similar facts are found in the case of hemoglobin; the chain of this protein in man differs from that of the lemurs by 20 amino acids, by only 14 from that of the pig, and by only 1 from that of the gorilla. The situation is practically the same for other proteins.¹⁶

By all other physical measures, of course, man should have been much more closely related to the horse, than to the kangaroo and the lemur than the pig. In a very provocative paper presented at the American Museum of Natural History, Dr. Colin Patterson, senior paleontologist at the British Museum of Natural History, cited several such anomalies and contradictions in the molecular data. Even though he is a leading evolutionist, he then concluded:

In other words, evolution may very well be true, but basing one's systematics on it will give bad systematics.¹⁷

Systematics, of course, is the discipline that tries to classify organisms in appropriate taxonomic groups supposed to reflect relationships.

As these protein-sequencing data continue to be accumulated in various labs, more and more unexpected — even bizarre — relationships have been found. For example:

The most controversial feature of Gardiner's cladogram is the close relationship that is suggested between birds and mammals . . . one French paleontologist has even published a

15 Gina Bara Kojata, "Evolution of DNA: Changes in Gene Regulation," *Science*, vol. 189 (August 8, 1975), p. 446–447.

16 Pierre P. Grassé, *Evolution of Living Organisms* (New York: Academic Press, 1977), p. 194.

17 Colin Patterson, "Evolutionism and Creationism," Speech at the American Museum of Natural History (New York, N.Y.: November 5, 1981), p. 14 of transcript.

restoration of the hypothetical common ancestor of birds and mammals — a sort of warm-blooded hairy/feathery, climbing insect eater!¹⁸

Yet, we are currently being told that birds evolved from dinosaurs — some scientists even say that birds *are* dinosaurs! Now, however, the relationship between mammals and birds that was suggested by cladistic analysis seems to be supported by the molecular data.

Adrian Friday and Martin Bishop of Cambridge have analyzed the available protein sequence data for tetrapods. . . . To their surprise, in nearly all cases, man (the mammal) and chicken (the bird) were paired off as closest relatives, with the crocodile as next nearest relative.¹⁹

Thus, both cladistics and molecular biology seem to imply that birds evolved from mammals. Hemoglobin was one of the proteins indicating this mammal-to-bird order.

Little has been heard from this theory in the past decade, however. The reptile-to-bird lobby has evidently prevailed.

Protein similarities continue to yield many surprises — in the evolutionary context, that is.

Proteins with nearly the same structure and function (homologous proteins) are found in increasing numbers in phylogenetically different, even very distinct taxa (e.g., hemoglobin in vertebrates, in some invertebrates, and even in certain plants).²⁰

Would this suggest that man is closely related to “certain plants?”

Dr. Christian Schwabe, a research biochemist in the Medical University of South Carolina, has been studying this field of evolutionary evidences for many years, especially the insulin and relaxin families of proteins, searching for reasonable phylogenetic relationships. He finds no indication of evolution anywhere, however, though he is clearly anti-creationist in his own beliefs.

18 Mike Benton, “Is a Dog More Like a Lizard or a Chicken?” *New Scientist*, vol. 103 (August 16, 1984), p. 19.

19 Ibid. Benton was a research scientist at the time in the Museum of the University of Oxford, in England.

20 Paul Erlich, “On the Probability of the Emergence of a Protein with a Particular Function,” *Acta Biotheoretica*, vol. 34 (1985), p. 53.

Molecular evolution is about to be accepted as a method superior to paleontology for the discovery of evolutionary relationships. As a molecular evolutionist I should be elated. Instead it seems disconcerting that many exceptions exist to the orderly progression of species as determined by molecular homologies; so many, in fact, that I think the exception, the quirks, may carry the more important message.²¹

In Schwabe's studies of relaxins, for example, he found many odd "relationships."

Against this background of high variability between relaxins from purportedly closely related species, the relaxins of pig and whale are all but identical. The molecules derived from rats, guinea pigs, man, and pigs are as distant from each other (approximately 55 percent) as all are from the elasmobranch's relaxin. . . . Insulin, however, brings man and pig closer together than chimpanzee and man.²²

Although his major research dealt with the relaxin and insulin families, Schwabe also noted similar phenomena in other protein molecules.

The relaxin and insulin families do not stand alone as exceptions to the orderly interpretation of molecular evolution in conventional monophyletic terms. . . . Additional examples of anomalous protein evolution . . . cover a range of *ad hoc* explanations apparently limited only by imagination.²³

He cites for examples similar anomalies in lysozymes, cytochromes, and various hormones. In fact, Schwabe goes so far as to suggest that traditional monophyletic evolution should be replaced by polyphyletic evolution — that there are multiple evolutionary trees stemming from many separate origin-of-life events. He notes that the proteins all seem to have been present from the beginning, and that there are no "transitional" evolutionary forms among the molecules, just as there are none among the fossils.

21 Christian Schwabe, "On the Validity of Molecular Evolution," *Trends in Biochemical Sciences*, vol. 11 (July 1986).

22 Christian Schwabe, "Theoretical Limitations of Molecular Phylogenetics and the Evolution of Relaxins," *Comparative Biochemical Physiology*, vol. 107B (1974), p. 171, 172.

23 Christian Schwabe and Gregory W. Warr, "A Polyphyletic View of Evolution," *Perspectives in Biology and Medicine*, vol. 27 (Spring 1984), p. 473.

Many more such inconsistencies have been observed by others in this *assumed* evidence from molecular homologies. Probably the most thorough discussion of them is found in a book by the molecular geneticist Michael Denton. In summarizing, he says the following:

Thousands of different sequences, protein and nucleic acid, have now been compared in hundreds of different species but never has any sequence been found to be in any sense the lineal descendant or ancestor of any other sequence . . . there are hundreds of different families of proteins and each family exhibits its own unique degree of interspecies variation, some greater than haemoglobin, some far less than the cytochromes . . . each ticking at its own unique and highly specific rate.²⁴

The Unstandard Time of Molecular Clocks

Even more difficulties become apparent when these supposed molecular homologies are used as a molecular “clock.” A recent authoritative study of this subject first defines this so-called clock as follows:

The fundamental tenet of the molecular clock hypothesis is that evolutionary rates of homologous proteins are regular, so that the interval separating living species from common ancestors is reflected in the degree of protein dissimilarity between them.²⁵

This assumption of uniform protein-divergence rates, that is, of constant nucleotide mutation rates, is an assumption implicitly based on neo-Darwinian population genetics. Korey shows that the critical factors of generation length, and numbers of individuals in the population have been ignored. This, of course, invalidates the whole procedure.

Coupled with complementary findings regarding the significance of species bottlenecks to protein divergence rates, these effects undermine the main premise of the clock thesis, especially as it applies to the dating of lineages not remotely separated.²⁶

24 Michael Denton, *Evolution: A Theory in Crisis* (London: Burnett Books, Inc., 1985), p. 289, 296.

25 Kenneth A. Korey, “Species Number, Generation Length, and the Molecular Clock,” *Evolution*, vol. 35, no. 1 (1981), p. 139.

26 *Ibid.*, p. 146.

Steven Stanley, who has rejected such gradualistic and uniformitarian premises for other reasons, is much less enamored with this molecular-homology idea than are the more traditional evolutionists.

Simple estimates of overall genetic distance between species reveal little about degrees and rates of morphologic divergence.²⁷

Korey has pointed out that the method as currently used will regularly give ages that are too “short” (that is, will underestimate the difference between the two organisms being compared, and, therefore, will underestimate the time since their assumed evolutionary divergence from a common ancestor). In particular, he criticizes the supposed close similarity between man and chimpanzee that has been inferred from the uniformitarian premise of the molecular clock.

Certainly the widely contested date for the separation of *pan* and *Homo* that Sarich and Wilson suggest is subject to this bias.²⁸

Dr. Vincent Sarich and A. C. Wilson, of the University of California at Berkeley, are the two scientists primarily responsible for the widespread notion that man, chimpanzee, and gorilla diverged from their “common ancestor” about five million years ago, as based on these interpretations of molecular chronologic homology.

In a review of an early symposium on the applications of these molecular homologies to evolutionary anthropology, the reviewer made the following cynical, but appropriate, concluding comment:

On the current state of theoretical evolutionary work as described in this volume, I quote higher authority: the Red King acting as judge in *Alice in Wonderland*. . . . “If there’s no meaning in it, that saves a lot of trouble, you know, as we needn’t try to find any.”²⁹

The situation since that time (1977) with respect to the molecular-clock idea has continued to deteriorate.

27 Steven M. Stanley, *Macroevolution: Pattern and Process* (San Francisco, CA: W. H. Freeman and Co., 1979), p. 61.

28 Korey, “Species Number,” p. 145.

29 Roy J. Britten, review of *Molecular Anthropology*, eds. Morris Goodman, R. E. Tashian, and J. H. Tashian (New York: Plenum, 1976), 466 pp., in *Science*, vol. 198 (October 21, 1977), p. 287.

Specifically, how accurate is the “molecular evolutionary clock”? . . . The very reasonable conclusion is that “using the primary structure of a single gene or protein to time evolutionary events or to reconstruct phylogenetic relationships is potentially fraught with error.” . . . There is no such thing as *the* molecular clock: there are several, each with different attributes.³⁰

Research from a number of labs is showing that clocks based on different molecules tick at different, and often varying, rates. . . . Moreover, the rates of DNA clocks based on different cellular sources of DNA can differ within the same organisms.³¹

Even Allan Wilson, one of the main promoters of the molecular-clock idea, later came to agree that the clock’s timekeeping is unreliable.

The molecular clock, however, does not tick at the same rate at every position along the DNA molecule.³²

In order to be very useful, the molecular clock somehow needs to be correlated with the chronology of the fossil record (which, of course, is highly variable itself). When the clock ticks differently for every molecule, this becomes a serious problem.

One of the major problems with molecular clocks is that they need to be located in an absolute time frame determined by the fossil record. Undoubtedly the best such clock available at the moment is the DNA–DNA hybridization clock of Sibley and Ahlquist, but Peter Houde argues that the DNA–DNA clocks needs to be reset. . . . If the picture envisaged by Houde is correct . . . then the datum on which DNA–DNA hybridization data is tied in to the fossil record is out by tens of millions of years.³³

If the “best clock” is wrong in its timekeeping by tens of millions of years, then what value could *any* of the others have?

30 Roger Lewin, “Molecular Clock Scrutinized,” *Science* (May 3, 1985), p. 571.

31 Ivan Amato, “Ticks in the Ticks of Molecular Clocks,” *Science News*, vol. 131 (January 31, 1987), p. 74.

32 Allan C. Wilson, “The Molecular Basis of Evolution,” *Scientific American*, vol. 253 (October 1985), p. 165.

33 Michael E. Howgate, “The German ‘Ostrich’ and the Molecular Clock,” *Nature*, vol. 324 (December 11, 1986), p. 516.

The most publicized application of molecular clocks has to do with the evolution of apes and men. Even here, however, the results are equivocal:

Hence, for the gorilla-chimp-human portion of the phylogeny, there is a strong rejection of the molecular clock hypothesis.³⁴

Morphology and molecular data are congruent in indicating that Homo and African apes are more closely related to each other than the orang. The position of chimps is equivocal, however; amino acid sequencing links them with humans, morphology links them with gorillas, and DNA sequencing has produced ambiguous results.³⁵

A more recent analysis of the whole subject of protein molecular clocks has led to a completely negative conclusion concerning their value and validity.

In fact, with growing numbers of sequences available, it becomes increasingly difficult to demonstrate a protein class at all which may be considered as a reliable molecular clock.³⁶

The scientist drawing this conclusion, Dr. Siegfried Scherer, is professor of biology at the University of Konstanz in Germany. After comprehensive analysis of all the data, he concludes:

Considering the strong demands usually applied in experimental biology, it is hard to understand why the concept survived such a long period at all.

The protein molecular clock hypothesis . . . has been tested empirically using ten different proteins representing more than 500 individual sequences from plants, animals, and prokaryotes. In no case a linearity within reasonable limits of confidence

34 Alan R. Templeton, "Phylogenetic Inference from Restriction Endonuclease Cleavage Site Maps with Particular Reference to the Evolution of Humans and the Apes," *Evolution*, vol. 37 (March 1983), p. 238.

35 Timothy Rowe, "New Issues for Phylogenetics," review of *Molecules and Morphology in Evolution*, ed. Colin Patterson (Cambridge University Press, 1987), in *Science*, vol. 239 (March 4, 1988), p. 1183.

36 Siegfried Scherer, "The Protein Molecular Clock: Time for a Re-evaluation," *Evolutionary Biology*, ed. Max K. Hecht, Bruce Wallace, and Ross J. MacIntyre, vol. 24 (1991), p. 94.

could be found. . . . This holds also for proteins such as cytochrome c or fibrinopeptides which usually have been considered as being reliable molecular clocks. . . . It is concluded that the protein molecular clock hypothesis should be rejected.³⁷

Junk DNA and Vestigial Genes

Two other supposed molecular evidences of evolution need to be discussed briefly. One is the so-called “junk DNA,” or surplus DNA, the 97 percent of the DNA molecule that does not code for proteins in the reproduction process. The other is what are called “pseudogenes”: genes which presumably once had useful functions, but have mutated and lost those functions, becoming mere vestiges of what they once were.

The DNA molecule itself contains all the genes, whether active or vestigial, whether useful or surplus. It is remarkable that this infinitely varying molecule is still DNA (deoxyribose nuclei acid), and that it is the basic substance in all living organisms, specifying and coding their own reproduction, so that every individual is unique and yet the same type as its progenitors. It is even more remarkable, however, that evolutionists somehow think that this fact is an evidence for evolution.

The outstanding example of a universal homology is the genetic code. . . . The code, although it is arbitrary, is known to be universal. . . . Now, if different species had been created separately, we should be very surprised if they had all been built with exactly the same genetic code. It would indeed be surprising if they had all used DNA as their genetic material; but even more surprising if they had all hit on the same code.³⁸

This particular deduction is a blatant *non sequitur* if there ever was one! Just *why* should it be surprising that all living organisms would be structured on the same basic blueprint of life? They did *not* “all hit on the same code,” but were all designed by the same infinitely wise designer. It would indeed be surprising, on the other hand, if their common ancestor hit on the genetic code by chance, as evolution would imply.

The code always involves the same basic molecular structure, but is so organized as to be able to program millions of distinct species, and, indeed, trillions of distinct individuals. Information scientists have calculated that there are more units of information in the genetic code

³⁷ Ibid., p. 102, 103.

³⁸ Mark Ridley, *The Problems of Evolution* (London: Oxford University Press, 1985), p. 10.

than in all the books ever written. That would surely be quite a “hit” for blind chance to hit on!

Furthermore, all that information is contained in just 3 percent or less of the human genome. Thus, 97 percent of the DNA is “junk DNA,” as they call it. This supposedly is just some of the excess baggage produced and accumulated by “neutral mutations” in the long course of evolution.

Now, however, evidence is becoming available to indicate that even the “junk DNA” is also organized for some distinct purpose.

The protein-coding portion of the genes account for only about 3 percent of the DNA in the human genome; the other 97 percent encodes no proteins. Most of this enormous, silent genetic majority has long been thought to have no real function — hence its name: “junk DNA.” But one researcher’s trash is another researcher’s treasure, and a growing number of scientists believe that hidden in the junk DNA are intellectual riches that will lead to a better understanding of diseases (possibly including cancer), normal genome repair and regulation, and perhaps even the evolution of multicellular organisms.³⁹

The main clue that some sort of information has been programmed in the “junk DNA” is that it seems to be structured in a non-random fashion, even though it does not code any protein.

By applying statistical methods developed by linguists, investigators have found that “junk” parts of the genomes of many organisms may be expressing a language. These regions have traditionally been regarded as useless accumulations of material from millions of years of evolution. . . . Over the past ten years, biologists began to suspect that this feature is not entirely trivial.⁴⁰

This is bound to be a fruitful area of research for years to come. The fact that the supposedly surplus 97 percent of the DNA in humans is not really surplus after all, but is designed for some yet-to-be-discovered purpose makes the amazing structure of this molecule more interesting than ever, and strengthens the already strong evidence for its special creation by an omniscient, omnipotent Creator.

39 Rachel Nowak, “Mining Treasures from ‘Junk DNA,’” *Science*, vol. 263 (February 4, 1994), p. 608.

40 Philip Yam, “Talking Trash,” *Scientific American*, vol. 23 (March 1995), p. 45.

Enough genes have already been uncovered in the genetic midden to show that what was once thought to be waste is definitely being transmitted into scientific code.⁴¹

But there is still another argument that evolutionists have advanced concerning the genetic system. This is based on the so-called “pseudogenes.” These entities involve a similar argument to that of the junk DNA. The difference is that junk DNA was thought to have been useless from the start, whereas pseudogenes are genes that were once believed to be useful but now to have lost their utility through one or more mutations.

A pseudogene is (probably) a molecular equivalent of the appendix in humans. It is a functionless vestige of a formerly functional gene; for instance, some pseudogenes lack one of the parts that are needed for a gene to be translated into a protein. If the gene is not translated, it must lie dormant inside its bearer.⁴²

These pseudogenes have been most extensively studied in simple organisms, but that is now changing:

Pseudogenes are now thought to be common in vertebrates and perhaps in other organisms as well.⁴³

In fact, homologous pseudogenes have been found recently in both humans and gorillas. It is *this* bit of evidence that has been touted as a conclusive proof of evolution from ape to man. Edward Max, who acknowledged that the argument from similarities was as effective an argument for creation as for evolution,⁴⁴ then argued that a pseudogene shared by man and gorilla proved conclusively that the two shared a common ancestor, a mutation in whose genome produced the pseudogene in question. Here is a summary of the reasoning employed:

This pseudogene [i.e., the processed immunoglobulin epsilon pseudogene] is apparently shared by man and gorilla, but is not found in other apes and monkeys. . . . The appearance of the same “error” — that is, the same useless pseudogene in the same position in human and ape DNA — cannot logically be explained by independent origins of these

41 Nowak, “Mining Treasures from ‘Junk DNA,’” p. 610.

42 Ridley, *The Problems of Evolution*, p. 71.

43 G. Ledyard Stebbins and Francisco J. Ayala, “The Evolution of Darwinism,” *Scientific American*, vol. 253 (July 1985), p. 75.

two sequences. . . . The possibility of identical rare genetic accidents creating the same two pseudogenes in ape and human DNA by *chance* is so unlikely that it can be dismissed . . . the existence of the two shared pseudogenes leads to the logical conclusion that both the human and ape sequences were copied from ancestral pseudogenes that must have arisen in a *common ancestor of humans and apes*.⁴⁵

At first, Max may seem to have a point, though one wonders why this pseudogene was not found in other apes, since they also were thought to have the same common ancestor as gorillas and humans. But then he undermines his own case by the following victory statement:

Evolutionists as early as Darwin pointed to vestigial structures . . . as supporting the evolutionary viewpoint. . . . Vestigial genetic sequences — that is, pseudogenes — provide exquisite examples of vestigial structures and, thus, especially compelling evidence for evolution.⁴⁶

The fact is, however, that vestigial structures do *not* support the evolutionary viewpoint. If they are really vestiges of once-useful structures, they represent deteriorations or losses, not gains or advances, in perfect accord with one of the stipulations of the basic creation model.

However, as already emphasized by S. R. Scadding, “vestigial organs provide no special evidence for the theory of evolution,”⁴⁷ but rather are simply expressions of contemporary ignorance concerning their function. Ridley mentioned the human appendix as analogous to pseudogenes, which he said were “functionless vestiges of formerly functional genes.”⁴⁸ The appendix, however, is no vestige of anything, but is now known to have an important lymphoid function in early life.⁴⁹

Just as the long list of more than 100 vestigial organs in man has long since vanished as discoveries of the functions of these organs gradually accumulated, so will this likely prove true for the “vestigial” genes. If certain human and gorilla homologous genes actually have a useful function not yet discovered, then there is no need whatever to *imagine* a

44 See footnote 12, this chapter.

45 Edward E. Max, “Plagiarized Errors and Molecular Genetics: Another Argument in the Evolution-Creation Controversy,” *Creation/Evolution*, vol. 19 (1986), p. 42.

46 *Ibid.*, p. 43.

47 See footnote 3, this chapter.

48 See footnote 42, this chapter.

49 See footnote 2, this chapter.

common ancestor for the two. The fact that we do not yet know what that function may be is simply a statement of current ignorance, just as was the appellation of “junk” to 97 percent of the human genome.

It is probable that future research will reveal that many of these so-called pseudogenes — just like the vestigial organs once thought to prove evolution — have *real functional purpose*. That has already been shown to be true in some cases. It seems possible — pending future research — that at least some pseudogenes can be activated on certain occasions to prevent harmful chromosome rearrangements resulting from radiations or other mutagenic influences. There may be other uses; at least it is always dangerous to “argue from silence.” The fact that biologists do not yet know the function of pseudogenes does not prove that they do not have any!

Therefore, the evidence continues to mount that creation is a far better model than evolution by which to explain and correlate the known facts of science.

Chapter 10

The Rocks and Fossils Tell of Sudden Death

In chapters 3–5, the testimony of the fossils — fossils that now are resting by the multi-billions in the sedimentary rocks of the earth’s crust — was shown clearly to favor special creation of each basic kind of organism and to deny evolution. No true evolutionary transitions between any two basic kinds of organisms are found anywhere among the fossils. Furthermore, the extreme complexity of each type and its marvelous symbiotic adaptation to its environment could never have organized themselves by random processes.

Our survey in chapter 2 — biologic processes as they exist at present (e.g., mutation and natural selection) — could never in a trillion years generate higher, more complex organisms, as evolutionary theory demands. Mutation is a *random process*, working to *disorder* any ordered system, and natural selection is a conservation process, sieving out the harmful mutations and thereby keeping the population essentially unchanged.

Consequently, the fossil record does not and cannot speak of evolution over the geologic ages. The question remains, however, as to what its real significance may be. It obviously speaks of death, because fossils are the dead remains of once-living plants and animals. But how and when their deaths occurred is a key question in the conflict between the creation and evolution models.

The geologic ages of the earth have, somewhat arbitrarily, been organized in terms of five great “eras,” as follows, proceeding from ancient to recent: (1) Archeozoic (no life); (2) Proterozoic (preliminary life); (3) Paleozoic (early life); (4) Mesozoic (intermediate life); and (5) Cenozoic

(recent life). Each of the eras is subdivided into periods, and the periods into epochs.

The resulting construct is called the geologic timetable, or the geologic column (the term “column” referring to an imaginary cross-section through the earth’s crust, with the oldest rocks at the bottom, the youngest at the top). If this column is real, there is at least a superficial appearance of evolution preserved there, with “simple” forms of life preserved as fossils in the oldest rocks, and more and more complex forms in progressively younger rocks.

Nevertheless, there are still no transitional forms, and the laws of thermodynamics and probability seem to stipulate that real evolution is impossible, so just what do all these rocks and fossils, with their respective “ages” actually represent? The situation is further complicated by the contention that radiometric dating has proved that the geologic ages are spread out through 4.6 billion years of earth history.

If such ages are real, then many would argue that there has at least been *time* for evolution, whether we see evidence of it or not. They would also impugn the wisdom of any presumed “creator” who would create by such a wasteful, inefficient, cruel process as evolution over billions of years, when He supposedly would be wise enough and powerful enough to choose and use a better way.

So, once again, if the rocks and fossils are not telling us about slow evolution over vast ages, just what *are* they saying? This is the question that we want to discuss in the present chapter and the following.

In this chapter it will be shown that the real testimony of geology and paleontology is not the evolution of life over many ages, but the cataclysmic destruction of life in one age. Then, in the next chapter, it will be demonstrated that the weight of all the combined scientific evidence is of one creation of all things, in a brief creation period not very long ago.

Return to Catastrophism

For almost two centuries, the dogma of uniformitarianism reigned unchallenged in the study of historical geology. The belief that “the present is the key to the past” governed almost all geological interpretation, and the age-long slow processes of erosion and sedimentation seemed a natural accompaniment to the age-long gradual processes of organic evolution. This dogma was like an albatross whose foreboding presence was stultifying any true understanding of earth history.

Our science is too encumbered with uniformitarian concepts that project the modern earth/life system as the primary

model for interpretation of evolution and extinction patterns in ancient ecosystems. Detailed paleoenvironmental data tell us the past is key to the present, not vice versa. . . . Abrupt, even catastrophic, regional to global mass mortalities and extinctions (bioevents) are predictable and commonly observed in phanerozoic strata.¹

The term “phanerozoic” is used by geologists to refer to almost all the fossil-bearing stratigraphic layers in the rocks, corresponding to all “ages” from the Cambrian onward. Therefore, numerous regional — and sometimes global — catastrophic events are now believed to have occurred in earth history after the coming of multi-cellular life to the earth. These “bioevents” are believed to have caused massive extinctions of life on earth.

The most publicized such “event” has been the supposed asteroid bombardment of earth that many believe caused the extinction of the dinosaurs, but geologists now are talking also about many others. A recent article says that there are no less than “15 phanerozoic mass extinctions known,” so that “a synthesis of mass extinction theory now seems possible.”²

This is all sharply in contrast with the long-held dogmas of uniformitarianism and slow-and-gradual evolutionism. These two dogmas have gone hand-in-glove ever since the days of Lyell and Darwin.

Sir Charles Lyell, a slightly older contemporary (and mentor) of Charles Darwin, is considered to be the “father of uniformitarianism.” He was a bitter opponent of the earlier “catastrophism” in geology, as advocated by Georges Cuvier and others, and even more so of what he called the “mosaic” geology and chronology. He was untiring in his efforts to discredit the Book of Genesis, even though he still professed belief in some form of “creation.”

His efforts largely succeeded, and soon the intellectuals of Darwin’s era had accepted the Lyellian doctrine of long ages of earth history, with present geologic processes deemed adequate to explain all the earth’s geologic systems and formations. Charles Darwin often acknowledged his debt to Lyell, stating that Lyell had provided him with the vast ages of time he needed to make his theory of evolution by natural selection feasible.

1 Eric Kauffman, “The Uniformitarian Albatross,” *Palaios*, vol. 2, no. 6 (1987), p. 531.

2 E. S. Kauffman and D. H. Erwin, “Surviving Mass Extinctions,” *Geotimes*, vol. 40 (March 1995), p. 14.

But they were both wrong! Lyell's uniformitarianism is rapidly being displaced by neo-catastrophism, and Darwin's gradual evolutionism is being rejected in favor of long ages of "stasis," followed by extinctions and evolutionary bursts. Although these younger geologists and paleontologists are every bit as committed to evolutionism as those of the older school, their arguments sound much like the same ones that creationists have been using since long before punctuationism and neo-catastrophism came along. In fact, these latter-day evolutionists tend to complain about this very similarity, and we creationists cannot help but suspect that our arguments are having an effect (though the evolutionists, of course, would never admit such a thing!). Note, for example, just two observations by leading modern geologists:

If the creationists could mount a successful attack on the validity of uniformitarianism, they would succeed in their effort to discredit modern geology.³

Creationists, of course, have never sought to "discredit modern geology." Geology is a wonderful and worthwhile science, and has made many vital contributions to civilization and human happiness. It is only so-called "historical geology" — which has gotten far off the track in advocating great ages and evolution — that creationists have debated and factually discredited. These latter constructs are concepts of naturalistic philosophy, not observational science, and have contributed nothing at all to civilization and human happiness.

Anyway, Shea goes on to complain that his fellow geologists have misunderstood uniformitarianism, and thereby given creationists ammunition to use against it.

This clearly creates a problem for anyone who tries to show that the creationist concept of uniformitarianism is not the concept actually followed by geologists.⁴

What he means is that modern geologists are now allowing for great geological catastrophes within the overall framework of uniformitarianism, which basically consists of their geologic-age system.

Another leading younger geologist also complains about Lyellian uniformitarianism and the dangers of creationism because of such misunderstandings.

3 James H. Shea, "Creationism, Uniformitarianism, Geology and Science," *Journal of Geological Education*, vol. 31 (1985), p. 105.

4 *Ibid.*, p. 107.

But the working hypothesis of the last century [that is, Lyell's dogma] has been turned into a dogma of today. Substantive uniformitarianism has been adopted as an article of faith, and catastrophists have been labeled fellow travelers of creationists.⁵

In my presidential address to the International Association of Sedimentologists, I pointed out the fallacy of the Lyellian dogma and coined the term "actualistic catastrophism."⁶

Whether geologists will adopt Hsu's actualistic catastrophism as somehow different from other types of geologic catastrophism remains to be seen.

Creationists have always been aware, of course, that uniformitarian geologists (even Lyell) have allowed for local catastrophes (floods, volcanic flows, earthquakes, etc.), but it is only recently (Shea and Hsu notwithstanding) that most geologists have been willing to consider such things as regional and even global catastrophes, as well as sudden global extinctions of many forms of plant and animal life. Creationists have been citing evidences of global catastrophism for years, and at last secular, evolutionist geologists are beginning to recognize them too.

Another somewhat snide (and fallacious) reference to the influence of creationists on the resurgence of catastrophism is found in a recent review of the last book written by Derek Ager, the man whom many would consider the prime mover of neo-catastrophism.

Indeed geology appears at last to have outgrown Lyell. In an intellectual shift that may well rival that which accompanied the widespread acceptance of plate tectonics, the last 30 years have witnessed an increasing acceptance of rapid, rare, episodic, and "catastrophic" events. Two aspects of this shift are noteworthy. First, it represents a powerful response to creationists, who often argue for wholesale rejection of all of historical geology whenever they find any indication of rapid geological phenomena. . . . Yet by the eminence of its author

5 Kenneth J. Hsu, "Actualistic Catastrophism and Global Change," *Paleogeography, Paleoclimatology, Paleocology*, Global and Planetary Change Section, vol. 89 (1990), p. 309.

6 *Ibid.*, p. 310.

and the straightforwardness of its tone, this volume may mark the arrival of catastrophism as the status quo.⁷

So, catastrophism is back — whether *because* of the creationists or as a *defense against* the creationists may be a matter of point of view. Dr. Ager had been president of the British Geological Association. His earlier book, *The Nature of the Stratigraphic Record*, which is referred to later in this chapter, had a profound and widespread influence on modern geologists. No doubt this last book, written shortly before his death, will have an even greater impact. He has shown that all types of geological structures, formations, and systems were formed catastrophically. As Allmon says, catastrophism in geology is about to become the status quo.

This new catastrophism in geology goes along with the new saltationism in biology. Gould, Eldredge, and others — as discussed in chapter 5 — have postulated lengthy periods of stasis followed by mass extinctions, as the “motor” of evolution.

Creationists, of course, have been postulating long periods of stasis (that is, “no evolution”) and mass extinction (that is, global catastrophism) as the true explanation of earth history since long before either Gould or Ager, but the latter-day paleontologists and geologists are now trying to put these phenomena into an over-all framework of evolutionary uniformitarianism.

The attempt is strained, to say the least. How can anyone realistically get the evolution of living organisms out of stasis and extinction? And how does one get over-all uniformitarianism out of nothing but catastrophically formed geologic systems? Science used to require observation, but all one ever really observes in the records of both past and present is stasis, catastrophe, and extinction — never evolution!

The records of past life are preserved in the fossils, and fossils — in order to become fossils — must be buried catastrophically.

Because mass mortality or instantaneous death and burial create the optimal initial conditions for fossilization, it is possible that a significant portion of our fossil record is due to such exceptional events. . . . Once an organism dies . . . there is usually intense competition among other organisms for the nutrients stored in its body. This combined with physical

7 Warren D. Allmon, “Post-Gradualism,” review of *The New Catastrophism*, by Derek Ager, *Science*, vol. 262 (October 1, 1993), p. 122. Allmon himself is with the Paleontological Research Institute associated with Cornell University in Ithaca, New York.

weathering and the dissolution of hard parts soon leads to destruction unless the remains are quickly buried.⁸

That means that older ideas of fossil production, such as the slow accumulation of organic debris at the bottom of a lake or ocean, will not produce fossils. It takes rapid, permanent burial.

These mechanisms contrast with the popular image of burial as a slow accumulation of sediment through long periods of time, a gentle fallout from air or water that gradually covers organic remains.⁹

For remains with simple or complex taphonomic histories, burial is still the most critical step in the process of preservation, and only permanent burial will produce lasting fossils.¹⁰

Not even stagnant, anaerobic conditions on sea floors are sufficient to preserve skeletons without rapid burial.

Studies of Allison (1988) on the decay and early diagenesis of arthropods and other types of weakly skeletonized organisms demonstrate that burial in anaerobic muds leads to rapid destruction of organic matter (within a few months) by anaerobic bacteria; such tissues can only be preserved if early mineralization inhibits further decay.¹¹

Therefore, many if not most, extraordinary fossil biotas record unusual, stressed environments.¹²

Thus, the regular existence of great fossil “graveyards,” in every geological “age,” clearly speaks of *massive catastrophism* in all these supposed “ages.”

Surprising Testimonies of Catastrophism

More and more evidence of rapid burial of fossils and rapid formation of geologic structures seems to be coming in all the time. Great fossil

8 Anna K. Behrensmeyer, “Taphonomy and the Fossil Record,” *American Scientist*, vol. 72 (November/December 1984), p. 560.

9 *Ibid.*, p. 360.

10 *Ibid.*, p. 361.

11 Carlton E. Brett, “Comparative Taphonomy and Ecology of Fossil ‘Mother Lodes,’” review of *Extraordinary Fossil Biotas*, eds. H. B. Whittington and Conway Morris (London: *Philosophical Transactions of the Royal Society*, Series B, 311, 1985, 191 pp.), reviewed in *Paleobiology*, vol. 14 (Spring 1988), p. 216.

12 *Ibid.*, p. 217.

graveyards of mammoths in Siberia, of amphibians in Texas, of hippopotami in Sicily, of fishes in California, Wyoming, Scotland, and many other places, and of dinosaurs on every continent, are well-known.

One of the more recent fossil lodes has been found in the Gobi Desert.

The Gobi Desert of Central Asia is one of the earth's most desolate places. . . . Yet the Gobi is a paradise for paleontologists. . . . dinosaurs, lizards and small mammals in an unprecedented state of preservation. . . . Among them are 25 skeletons of theropod dinosaurs . . . more than 200 skulls of mammals . . . an even greater number of lizard skulls and skeletons.¹³

It was disappointing to paleontologists, in a way, to find so many fossils of dinosaurs along with so many mammals. These two groups of animals were supposed to have been separated from each other by "a gap of at least several million years." There was no indication of the "iridium boundary" that was presumed to mark the asteroid impact which many believe wiped out the dinosaurs at the Cretaceous/Tertiary boundary, opening the way for mammals.

Whatever cataclysm wiped out the dinosaurs (and many other species . . .), its mark on Central Asia seems to have been erased.¹⁴

Evolutionists are embarrassed by this unexpected abundance of both Cretaceous reptiles and Tertiary mammals in the same formation. In fact, the dinosaur deposits are believed to be one of the best in the world!

The Cretaceous Gobi is unquestionably one of the world's great dinosaur hunting grounds.¹⁵

In any case, dinosaur fossils in abundance are found all over the world, as already mentioned. Dinosaur graveyards are known in Europe, Africa, Australia, North America, South America — even as far north as Spitzbergen. In recent years they have also been found near the South Pole.

13 Michael J. Novacek et al., "Fossils of the Flaming Cliffs," *Scientific American*, vol. 271 (December 1994), p. 60, 62.

14 *Ibid.*, p. 69.

15 *Ibid.*, p. 66.

Scientists have reported discovering the first set of dinosaur fossils ever to be found in the interior of Antarctica. The fossils are said to be the remains of a plant eating dinosaur, 25 to 30 feet long . . . about 400 miles from the South Pole.¹⁶

Not only is there an abundance of dinosaur bones, but even of their footprints, though the latter are not usually found with their bones.

Tracks, trailways, nests, eggs, and coprolites of the reptilian masters of the Mesozoic are chronicled from all over the world. . . . Lockley and Conrad report North American occurrences of dinosaur tracks in alluvial fans, fluvial floodplains, desert dunes, interdune environments, lacustrine settings, deltas, and marine shoreline systems.¹⁷

It is not necessary to multiply examples of great fossil deposits, though it would easily be possible, because it is now commonly accepted knowledge that fossil beds require catastrophic burial of some kind. It is also universally recognized that fossils are used to identify and date the ages of the rocks where they are found (this will be discussed later). Therefore, all fossil deposits, which means practically all sedimentary rocks, speak of catastrophism rather than of uniformitarianism.

An often-cited example of uniformitarianism and long ages has been the great salt beds of the world. The traditional explanation of these has been that they were formed by long-continuing evaporation of salt-laden waters trapped in inland seas with no outlet, such as the present Dead Sea. They have even been called "evaporites," in deference to their presumed method of formation.

As the extent of the deposits has become better known, however, this interpretation has become essentially impossible:

Many salt domes of the Gulf Coast would tower above Mount Everest if they were above ground. Some reach as much as eight miles above the bed of salt that formed them. At their caps the domes average two miles in diameter, and they are still broader at greater depth. From east Texas through Louisiana and Mississippi to Alabama, and offshore

16 Chris Raymond, "Scientists Report Finding Fossils of Dinosaurs in Antarctica's Interior," *Chronicle of Higher Education* (March 20, 1991), p. A11.

17 A. A. Ekdale, "Dinosaur Tracks and Traces," review of *Dinosaur Tracks and Traces*, eds. D. D. Gillette and M. S. Lockley (New York: Cambridge University Press, 1989, 454 p.), in *Palaios*, vol. 5 (April 1990), p. 199.

under the Gulf itself, more than 500 salt domes have been identified.¹⁸

These are only the salt deposits along the Gulf Coast, of course, and there are many others all over the world.

For example, the “evaporites” under the Mediterranean are more than a kilometer thick, and have been made the basis of an elaborate theory about one or more times in the past when the Mediterranean was presumably a desert. This fantastic theory becomes unnecessary when it is realized that these vast salt beds are not “evaporites” at all.

In referring to “evaporite” of the evaporitic facies, the term begs the question as it implies desiccation. For clarity, geology needs a new term; namely, “precipitite,” rock created by precipitation. Hence, rocks of the evaporitic facies could be evaporites resulting from evaporation of precipitites, deposited by precipitation from a supersaturated solution. Our view is that the sub-Mediterranean salts are precipitites.¹⁹

Precipitation from a supersaturated solution, say a thick brine, or slurry, would not require long ages of time, but only appropriate levels of pressure and temperature, as well as massive amounts of dissolved or suspended salts. We may not know of a similar situation occurring today, but at least the precipitite concept seems much more plausible than the evaporite concept.

Other former arguments for uniformitarianism have included the formation of coal and oil, the growth of coral reefs and massive limestones, the formation of stalagmites in caves, the growth of successive petrified forests, and others. All are now known to lend themselves better to some form of catastrophic interpretation.

Consider the formation of oil, for example. Although the ultimate source of oil (whether great masses of fossil invertebrates (possibly algae) or inorganic exudations from the earth’s mantle) has been a matter of dispute among geologists for many years, it has generally been assumed that the process takes a very long time.

More and more, however, it is being shown that oil can be produced very quickly under the right conditions. One of the most recent

18 Joseph D. Martinez, “Salt Domes,” *American Scientist*, vol. 79 (September/October 1991), p. 480.

19 Robert S. Dietz and Mitchell Woodhouse, “Mediterranean Theory May Be All Wet,” *Geotimes*, vol. 33 (May 1988), p. 4.

laboratory demonstrations of this fact has been conducted by Exxon Oil Company scientists, in tests on organic-rich shales from all over the world. These samples were heated and pressurized in a reaction vessel, vastly speeding up the time required to generate oil from the such organic-rich shales.

These hotter than natural conditions sped up the transformation from a geologic time frame of millions of years to one measured in days and hours.²⁰

However, it was found that just high pressure and temperature were not quite enough to produce the oil.

They discovered that high temperatures cause an organic molecule to break into fragments — and so does water and brine, sometimes more effectively. . . . The results indicate that hot water becomes a catalyst for a series of ionic reactions — creating a second pathway for the cascade of molecular transformations that leads to oil. The acidic and basic nature of hot water — rather than heat — drives this cascade.²¹

Therefore, oil can be produced rapidly from oily rock (whatever causes *that*) in a hot-water, pressurized, briny, cataclysmic environment.

Thus coal and oil, which are the most important geological resources economically, and provide employment for more geologists than all other occupations combined, are increasingly being recognized as catastrophic in origin, *not requiring long ages at all*, as once believed. In fact, they can each be formed quite rapidly in the laboratory.

A group at Argonne National Laboratory near Chicago, Illinois, recently uncovered some clues as to the origin of coal. The studies indicate that currently accepted theories of the development of coal probably are wrong. . . . The group heated undecomposed lignin, the substance that holds plant cells together, in the presence of montmorillite, or illite clay. The process led to simple coals, whose rank depended on the length of exposure to the 300° F temperature.²²

20 Elizabeth Pennisi, "Water, Water Everywhere," *Science News*, vol. 143 (February 20, 1993), p. 124.

21 *Ibid.*, p. 125.

22 "Basic Coal Studies Refute Current Theories of Formation," *Research and Development* (February 1984), p. 82).

With large quantities of plant material uprooted and transported by flooding waters, and with eroded and/or erupted clay materials abundantly available, plus heat from volcanism, conditions would be ideal for the formation of tremendous quantities of coal. The same is true for oil and for gas.

For six years, two Australian researchers patiently watched over a set of 1-gm samples of organic material sealed inside stainless steel “bombs.” The samples were derived from brown coal and a type of oil shale called torbanite. Each week, the temperature of the samples was increased by 1° C, gradually heating the material from 100° to 400° C. . . . The researchers found that after four years a product “indistinguishable from a paraffinic crude oil” was generated from the torbanite-derived samples, while brown coal produced a “wet natural gas.”²³

There are also more and more indications that oil can be formed rapidly in nature:

Oceanic hot springs, the site of strange colonies of marine life, may also be a breeding ground for new sources of oil and gas, according to new findings from a research mission in the Gulf of California.

Scientists say that the discovery, in the Guaymas basin off Baja California, indicates that petroleum may be rapidly produced in nature under the pressure-cooker environment of these deep-sea springs — in thousands of years, rather than millions.²⁴

Another interesting development is the recognition that the formation of stalactites and stalagmites in caverns does not require the millions of years commonly cited by tour guides and older textbooks. They have been found in mine tunnels and underneath various structures, and have even been produced in the laboratory. Even more surprising was the discovery that they have been produced *organically*, not just by evaporation of calcium-carbonate from water dripping from a cavern roof.

One has always held that the calcareous concretions in caves are the work of water and the chemical constituents of the rock. Surprise! The true workers in the kingdom of darkness

²³ *Science News*, vol. 125 (March 24, 1984), p. 187).

²⁴ *Copley News Service* (January 30, 1982).

are living organisms. . . . Indeed, an electron microscope photograph . . . shows that a web of mineralized bacteria is also an integral part of the stalactite's structure. Laboratory simulations have shown that micro-organisms take an active role in the process of mineralization. . . . Besides being a surprising adjustment of our ideas of stalactite growth, the recognition that micro-organisms may play an active role in the subterranean world stimulates two new questions: (1) Can we believe any longer that a stalactite size is a measure of age? (2) Is the immense network of known caves (some as long as 500 kilometers) the consequence *only* of chemical action?²⁵

Stop Continental Drift

Not because it is particularly germane to the creation/evolution question, or even to the age of the earth, but because it has so captivated the popular imagination, it is worth while to inject here a few words of caution about the current concept of continental drift, with all the accompanying scenario of sea floor spreading, magnetic reversals, plate tectonics, and other phenomena. This is a very far-reaching model, or even a paradigm, but it is much like evolution. That is, it is so flexible that anything can be made to fit it, and it is therefore non-testable. R. A. Lyttelton, one of the world's outstanding astro/geophysicists, has called attention to this weakness:

As for the vast verbal and pictorial literature of plate tectonics, with its assumptions, it may surprise some to learn that it simply fails to qualify as a scientific theory. I am sure Jeffries fully agrees with this. Long ago, the great Poincare explained that such descriptive accounts are not the role of physical theories, which should not introduce as many or more arbitrary constants (or verbal assumptions) as there are phenomena to be accounted for; they should establish connections between different experimental facts, and above all they should enable predictions to be made.²⁶

The continental drift/plate tectonics paradigm does *not* yield "predictions" that can be tested experimentally, but only "retrodictions" at

25 W. A. Corliss, "Living Stalactites," *Science Frontiers*, no. 57 (May/June 1988), p. 3. Corliss is referring to an article by Georges Dupont, "Et Si les Stalactites Etalent Vivantes" in the French science journal, *Science et Vie* (August 1987), p. 86.

26 R. A. Lyttelton, *Nature*, vol. 305 (October 20, 1983), p. 672.

best, which may possibly fit the model, of course, since it is so completely plastic and allows as many modifying assumptions as may be needed to make it fit. Lyttelton gives in both this article and elsewhere many examples of the weakness of this concept, especially in explaining past periods of mountain building. Sir Harold Jeffries, who was also one of the world's top astro-geophysicists, whom Lyttelton mentioned, also rejected the whole idea, for many good reasons, as do various other competent geologists and geophysicists, today.

The nearest thing to an experimental test of the idea would be an actual measurement of the distance between two continents, to see whether that distance is changing. This has actually become possible by the development of astronomical interferometers. So far, the results have been controversial, the weight of evidence still indicating no movement.

Interferometry is a technique for combining signals received simultaneously from a given astronomical source at two or more different telescopes. . . . They have done geodetic and astronomic measurements since 1979 and in that time have noticed no significant changes in the distances between the telescopes. Theories of continental drift and gravity theories in which the earth expands over time would expect change.²⁷

Meanwhile, since the continents drift as slowly as one's fingernails grow — from one to ten centimeters per year — even the most precise surveying methods available today have not yet detected drift.²⁸

This negative result, of course, does not prove that the continents have not drifted or moved in the past. Nor, for that matter, would any future positive result prove that they *did* drift in the past. Even *if* they did, it would not prove that they did not drift *much faster* in the past. The problem is that the whole concept is simply too flexible to be testable.

In the meantime, it is unnecessary for creationists to take any specific position on this subject, since it does not affect the creation/evolution issue one way or another. When it is incorporated as an integral part of the long-age evolutionary model, of course, as some have done, then it can and should be rejected as unscientific and false.

²⁷ *Science News*, vol. 123 (January 8, 1983), p. 20.

²⁸ Robert Dietz, "In Defense of Drift," *The Sciences*, vol. 23 (November/December 1983), p. 26.

Closely associated with continental drift, of course, is the concept of sea floor spreading, which, in turn, was based on parallel patterns of reversals of the so-called magnetic stripes of the Mid-Atlantic Ridge. The reversals of the magnetized particles in these stripes are taken to mean that the earth's magnetic poles reverse their polarity about every 700,000 years, so that the magnetic field changes directions by 180° at these intervals. The sea floor is assumed to be emerging from the earth's mantle at the Ridge, then moving away from the Ridge in opposite directions, carrying the continents (e.g., Africa and South America) with it. The great ages of these stripes have been determined mainly by potassium-argon dating of the lava rocks being formed by this process. This has been going on, evolutionists say, since at least the end of the Cretaceous "period" about 75 (or more) million years ago (at that time, all the continents are assumed to have been together in one super-continent, Pangea).

Apart from the exorbitant time periods involved in this supposed process, most creationists would not be greatly concerned whether or not the continental drift/sea floor spreading/plate tectonics paradigm is valid. The long ages, however, will be shown in the next chapter to be very doubtful. Like evolution itself, the theory is excessively flexible and adaptable, capable of being made to fit many geological and paleontological phenomena. Like evolution, it cannot be observed in operation, so it cannot be either proved or disproved, scientifically.

Its main evidence, however — the laterally symmetrical reversals of the magnetic stripes on the sea floor — has in recent years been brought into serious question. That is, there are now known to be "vertical-stripe reversals," as well as lateral, and this tremendously complicates any notion of a globally changing magnetic field.

Internal polarity changes with depth in a drilled sequence of oceanic crustal rocks do not match the observed magnetic "stripe" polarity measured on the surface.²⁹

Thus, there is a three-dimensional complex pattern of reversals in the sea floor that seems to negate the simple dipole-field reversal hypothesis, which is the main "proof" offered for sea floor spreading.

These several vertically alternating layers of opposing magnetic polarization directions found in cored oceanic crust

29 J. C. Pratsch, "Petroleum Geologist's View of Oceanic Crust Age," *Oil and Gas Journal*, vol. 84 (July 14, 1986), p. 114.

disproves one of the basic parameters of sea floor spreading theory, namely that the oceanic crust was magnetized entirely as it spread laterally from the magmatic center.³⁰

Among other things, these mixed-up stripes completely negate their use in age determinations.

It appears today that oceanic magnetic stripes have no value for age determinations of oceanic crusts; they are originating beneath oceanic basalt levels, and they originate in linear fault or fracture systems.³¹

Since sea floor spreading is the chief evidence for continental drift, the latter is also questionable.

But we would be well advised to reconsider the mechanics and scales of continental drift . . . none of the geological and geophysical data from subduction zones indicate absolute motions of oceans or adjacent continents.³²

For some reason, these facts seem not to have had much effect on the confidence of geologists in the drift paradigm. However, the author cited above is not the only one who has reported these disturbing phenomena.³³

Furthermore, the whole concept of plate tectonics now is under a cloud, despite the mountain of evolutionary applications and interpretations that have been erected on it. There are other difficulties with it as well.

But plate tectonics, too, has its faults. While the theory is very successful at explaining how oceans and oceanic crust form, in many ways it leaves the continents high and dry. In the case of the India-Asia collision, for instance, it doesn't explain why the oldest part of the Indian plate has survived the collision intact while sections of Asia have been evidently deformed.³⁴

30 Ibid., p. 115.

31 Ibid.

32 J. M. Hall and P. T. Robinson, "Deep Crustal Drilling in North Atlantic Ocean," *Science*, vol. 204 (May 11, 1979), p. 573-586.

33 Richard A. Kerr, "How Is New Ocean Crust Formed?" *Science*, vol. 205 (September 14, 1979), p. 1115-1118.

34 Stefi Weisburd, "Rooting for Continental Roots," *Science*, vol. 130 (December 13, 1986), p. 380.

After discussing the evidences that the assumed “plates” are not of the same thickness under continents and oceans (as assumed in plate-tectonics theory), but that the thickness under the stable continental cores is much thicker, this author concludes:

Continental roots may not represent another geosciences revolution in the making, but they certainly demonstrate that the conventional plate tectonics theory is not gospel.³⁵

It has long been recognized that the chief difficulty with the whole idea of dipole magnetic reversals, with all the theoretical baggage heaped on that assumption, is the lack of a mechanism in the earth’s core — or anywhere else — to cause such a remarkable turnover, and to move whole continents apart. The usual suggestion (still utterly unobserved and unexplained) is that there are huge “convective cells” or heating cells of some sort deep in the earth’s mantle, driven somehow by a tremendous “dynamo” in the core. Soon after this idea was introduced, Dr. A. E. J. Engel, professor of geology at the California Institute of Technology, made an interesting — and still relevant — comment:

Large convective cells in the earth’s mantle caused by terrestrial reheating have been invoked to move the continents, make the mountains, spread the ocean’s floor, and create the tremendous secular changes that we see manifest in the surficial complexity of the earth’s crust. The mechanism of large convective cells as agents of these several major dynamic events is a most functional, if untestable, hypothesis. Belief in cells is akin to belief in an orthodox God. Few earth scientists, I suspect, really believe in either completely; yet none is clever enough to invent working hypotheses less testable, more tantalizing, self-sufficing, and all encompassing as God or the convective cell.³⁶

The whole paradigm associated with plate tectonics (including continental drift, sea floor spreading, magnetic-field reversals, mountain-building, biogeographical evolution, etc.) is thus still largely — like evolution — a matter of faith.

One Worldwide Cataclysm

Examples of catastrophic, rapid formation of rock systems in the geologic systems of the earth, like those cited above in this chapter, could

³⁵ Ibid., p. 382.

³⁶ A. E.J. Engel, “Time and the Earth,” *American Scientist*, vol. 57 (Winter 1969), p. 475

be multiplied, eventually covering every component of the geologic column. There is literally *no* geologic system or structure or formation that *requires* for its explanation long, slow processes extending over thousands or millions of year. Dr. Derek Ager said in the closing sentence of his famous book *Nature of the Stratigraphic Record*:

The history of any one part of the earth, like the life of a soldier, consists of long periods of boredom and short periods of terror.³⁷

That is, every thing we can actually see in the geologic records indicates formation by very rapid processes.

Ager was not a creationist, of course. In fact, he complained about being quoted by creationists. Nevertheless, he did argue strongly against any form of uniformitarianism. If there is any doubt about his conclusion, one should look also at the following statement:

To me the whole record is catastrophic . . . in the sense that only the episodic events — the occasional ones — are preserved for us.³⁸

Dr. Ager continued to believe in long geological ages, but he pointed out that the actual geological record in the rocks does not include “the long ages of boredom” (these would correspond to the paleontologist’s long ages of *stasis*), but only “the short periods of terror” (corresponding to the mass extinctions and evolutionary punctuations).

As noted earlier, Ager was not merely an eccentric catastrophist in a profession still dominated by uniformitarians. He was a highly respected professional, serving as president of the British Geological Association, and he is now widely recognized as leader of the neo-catastrophist school, which probably is the dominant position among current geologists.

We are justified, therefore, in concluding that all components of the actual geological structures, formations, and systems in the earth’s crust have been formed catastrophically and rapidly. The remaining question is whether they have all been formed recently, essentially in one period of

37 Derek Ager, *Nature of the Stratigraphic Record*, 3rd Ed. (New York: John Wiley and Sons, Inc., 1993), p. 141. This sentence has now become a common cliché among the younger school of geologists.

38 Derek Ager, in *Catastrophes and Earth History*, eds. W. A. Berggren and J. A. Van Couvering (Princeton University Press, 1984), p. 93.

great upheaval on the earth, or intermittently, in the traditional 4.6-billion-year framework of assumed earth history.

Uniformitarianism did dominate standard geological thought and teaching for 150 years. Now, suddenly, almost the entire geological community seems to have swung over to neo-catastrophism. Still unwilling to accept again the catastrophism of the founding fathers of geology, centered in a worldwide deluge, the emphasis currently is on the necessity of postulating all sorts of other catastrophes (asteroids, meteorites, comets, volcanoes, regional floods, slipping crusts, splitting continents, sudden pole reversals, and other similar phenomena) to explain practically all such geological data. Two fairly recent summaries may be taken as typical. Reviewing an important meeting, Dr. Roger Lewin says this:

“It is a great philosophical breakthrough for geologists to accept catastrophism as a normal part of earth history.” This comment, made by Erle Kauffman at a meeting on the dynamics of extinction held recently at Northern Arizona University, Flagstaff, identifies a currently important, perhaps revolutionary, shift in collective professional perspectives among paleontologists as well as geologists. . . . The new catastrophism, if such an emotive phrase can be permitted, for many would disavow the designation, merely allows for asteroid impact as one of many agents that from time to time profoundly perturb global conditions important to life, including atmospheric and oceanic circulation, temperature gradient, and sea level.³⁹

One of the men largely responsible for this notable new science of the “dynamics of extinction” is Dr. David Raup, head of geology of the University of Chicago and curator of geology at the Field Museum. He says:

A great deal has changed, however, and contemporary geologists and paleontologists now generally accept catastrophism as a “way of life,” although they may avoid the word catastrophe. In fact, many geologists now see rare, short-lived events as being the principal contributors to geological sequences. . . . The periods of relative quiet contribute only a small part of the record.⁴⁰

39 Roger Lewin, *Science*, vol. 221 (September 2, 1983), p. 935.

40 David Raup, *Field Museum of Natural History Bulletin*, vol. 54 (March 1983), p. 21.

Geological uniformitarianism, which creationists have been vigorously opposing for over 50 years, has thus suddenly been all but abandoned by the geologists themselves, so there is hardly any point any more in citing the many weaknesses of the uniformitarian concept, or the numerous evidences of catastrophe in the rock strata. For those wanting more documentation, the ICR Technical Monograph *Catastrophes in Earth History* by Dr. Steven Austin (1983) contains extensive annotated bibliographies on this neo-catastrophist movement among evolutionary geologists. This has been kept updated in his ICR computer disc CATASTROREF.

Perhaps it is because evolutionists have been, for 150 years, so singularly unsuccessful at learning the mechanics of evolution, that they have been turning to the “dynamics of extinction.” The current abandonment of gradualism in biological evolution has coincided with the recent abandonment of gradualism in geological evolution. Punctuationism (rapid evolution in a small population) has come into vogue in biology, concurrently with neo-catastrophism in geology, and it is naturally very tempting to relate — or even to equate — the two. Many contemporary evolutionists are doing just that, though with reservations.

For example, T. H. Van Andel commented as follows several years ago, after first pointing out that the geological record is essentially one of rare catastrophic events separated by long gaps when nothing much was happening:

Among the many ideas fermenting today in the study of evolution there is one, frequently heard, that ascribes the major evolutionary steps to a jump advance, a concentration of major change in a very brief interval of time. There seems to be no good reason why such pulses of evolutionary change should coincide with the major rare events that built the sedimentary sequence in which the record of evolution is contained. Thus, the new “catastrophist” view of the sedimentary record implies that key elements of the evolutionary record may be forever out of reach.⁴¹

This pessimistic view concerning the impossibility of ever learning how evolution worked was written before the “discovery” by Raup and Sepkowski that massive extinctions have occurred at what they interpreted to be 26 million-year intervals throughout geologic history (it has since been shown that the statistical controls on this study were so weak as to disqualify its conclusions).

41 T.H. Van Andel, *Nature*, vol. 294 (December 3, 1981), p. 398.

At any rate, the fossils do seem to record many extinctions (e.g., the dinosaurs), so evolutionists are hopeful that this may somehow provide the key to the evolution of life. Michael Benton, in the zoology department at Oxford University, has said:

There is increasing evidence that major physical changes have caused more large-scale evolutionary changes than has competition. . . . Competition may increase the probability of extinction of a particular lineage, but it will rarely be the sole cause, whereas it could be postulated that a catastrophic change in the physical environment is sufficient on its own.⁴²

Likewise, Roger Lewin of the American Association for Advancement of Science comments on the necessity — but the overwhelming difficulty — of trying to relate evolutionary advances to geologic catastrophes:

Each mass extinction in a sense resets the evolutionary clock and so makes the history of life strikingly spasmodic and governed by a greater element of chance than is palatable in strict uniformitarianism. . . . The notorious paucity of the fossil record combines with a greatly varying sedimentation rate to make time resolution of faunal changes little short of a nightmare.⁴³

At the 1983 annual meeting of the Geological Society of America, held in Indianapolis, there seemed to be, especially among the paleontologists, an overwhelming consensus developing that catastrophes and their accompanying mass extinctions somehow hold the key to understanding evolution. Dr. Stephen Gould, describing this development with his enthusiastic endorsement, reported:

There . . . a group of my colleagues in paleontology began to dismantle an old order of thinking about old objects, and to construct a new and striking approach to a major feature of life's history on earth: mass extinction . . . mass extinctions have been more frequent, more unusual, more intense (in numbers

42 Michael Benton, *Nature*, vol. 302 (March 3, 1983), p. 16, 17.

43 Roger Lewin, "Extinctions and the History of Life," *Science*, vol. 221 (September 2, 1983), p. 935.

eliminated), and more different (in effect versus the patterns of normal times) than we had ever suspected.⁴⁴

Now, mass extinctions — unusual, intense, different — correlate nicely with the concept of cataclysm, but it is difficult to see how extinctions can tell us anything about evolution! The *extinction* of life would seem to be the polar opposite of the *evolution* of life. Even if we could determine for sure, say, that an asteroid impact resulted in the extinction of the dinosaurs, this would tell us nothing whatever about how they evolved in the first place. Nevertheless, Gould wistfully clings to this hope:

Heretofore, we have thrown up our hands in frustration at the lack of expected pattern in life's history — or we have sought to impose a pattern that we hope to find on a world that does not really display it. . . . If we can develop a general theory of mass extinction, we may finally understand why life has thwarted our expectations — and we may even extract an unexpected kind of pattern from apparent chaos.⁴⁵

Well, “hope springs eternal,” and to the evolutionists anything is apparently preferable to creationism. Nevertheless, Gould is here retreating again to his Marxist faith that chaos and destruction, in some utterly mystical way, somehow generate higher order and a better society. In any case, this absurd current notion of evolution generated suddenly by catastrophism, extinction, chance preservation, and quantum speciation of hopeful monsters speaks more loudly than any creationist critique could do, of the utter hopelessness of the scientific case for evolution.

In seeking to determine whether the multitudinous evidences of catastrophism in the earth's crust represent many local catastrophes spread over billions of years, or one complex of catastrophes occurring essentially contemporaneously in a global cataclysm, it is well to note that the various “ages” are determined mainly by their so-called “index fossils.” This will be discussed in the next chapter.

Although there are many, many different types of rocks and minerals and structural features, they are each and all scattered indiscriminately through the various ages. That is, any so-called geologic age can include shales, basalts, limestones, and any other petrologic complex; any geologic age may yield quartz, feldspar, iron, or any other mineral or metal;

⁴⁴ Stephen J. Gould, *Natural History* (February 1984), p. 14.

⁴⁵ *Ibid.*, p. 23.

any geologic age may have rocks containing coal or oil or natural gas; and any age may exhibit any type of fold, fault, intrusion, or other structural features. The rocks all seem to be *one* age as far as their physical and chemical characteristics are concerned!

It is even more important to note that the *only* global unconformity in the geologic column occurs right at the bottom of the column, where it rests on the crystalline basement. What this means is that the sedimentation process that deposited the sediments which eventually became the sedimentary rocks that make up the geologic column was continuous, from bottom to top, without a significant time break, with the exception of the surficial sediments deposited intermittently during the few thousand years of recorded history.

Now, an “unconformity” is the contact surface between two rock formations (say, for example, where a shale formation overlies a sandstone formation) when the sediments above and below the surface do not “conform” to each other in terms of the direction of the strata (or “layers” of sediment) that comprise the two formations. Flat lying strata may overlie a set of planed-off inclined strata, for instance, with the interface surface between the two sets called an unconformity.

The significance of all this is that an unconformity surface represents an erosional surface and, therefore, an unknown lapse of time between the time when the strata of the lower formation stopped being deposited and the strata of the upper formation began to be deposited. An unconformity, in short, represents a time gap in the process of sedimentary deposition when the sediments that would eventually be hardened into sedimentary rocks were first being laid down.

A conformity, on the other hand, is an interface between two formations in which the sedimentary strata above and below conform to each other in orientation and angle, with no evidence of time lapse between them — no soil profile, bioturbation, etc. The implication in such a case would be that the deposition process was continuous, with the formation above laid down immediately after the one below, with no opportunity for any intervening earth movements or sea-level drop or other physical change to initiate erosion instead of deposition on the surface.

There are some conformity surfaces, however, where it is thought that a time lapse may have occurred, because of a sudden change in the evolutionary stage of the contained fossils above and below. Such situations have been called “deceptive conformities” or “paraconformities,” but, since their main mark of recognition is the

absence of an assumed intervening evolutionary stage, they are questionable, to say the least.

In general, therefore, a conformity surface indicates continuous deposition, whereas an unconformity indicates a significant gap in time in that part of the geologic column. The missing time may be long or short; there is no way to tell from the unconformity itself.

With this background discussion, it should be easy to see that, if there were such a thing as a worldwide unconformity, say between the Cambrian period and the Ordovician period (or any two other geological “ages”), it would be an ideal way of demarking the various geological ages and dating the rocks. As a matter of fact, in the very early days of the development of historical geology, this was actually believed to be the case.

This idea, however, was abandoned long ago, not only on a worldwide basis, but even on a local basis. Note the following recommendation by two top authorities, written soon after World War II:

The employment of unconformities as time-stratigraphic boundaries should be abandoned. Because of the failure of unconformities as time indices, time-stratigraphic boundaries of Paleozoic and later age must be defined by time — hence by faunas.⁴⁶

Once again, it is emphasized that rocks are “dated” not by any physical criteria — even such obvious time boundaries as unconformities — but only by fossils, which means by assumed evolution.

A more recent, and authoritative, confirmation of the very important fact that “unconformities” in the geologic column, which represent time gaps of unknown duration in the formations where they occur, are *not* worldwide, and, therefore, cannot represent worldwide time gaps, is noted in the following statement:

Bounding unconformities were the basis for establishing many of the earliest stratigraphic units in western Europe. Many of the systems of the present accepted Standard Global Chronostratigraphic Scale were originally unconformity-bounded units. This procedure has not been restricted, however, to the earliest days of stratigraphic work or to western Europe; it has been used, and continues to be used, in all parts of the world. Unconformity-bounded units became very popular at

⁴⁶ H.E. Wheeler and E. M. Beesley, “Critique of the Time-Stratigraphic Concept,” *Bulletin of the Geological Society of America*, vol. 59 (1948), p. 84.

the time tectonic episodes were considered essentially synchronous worldwide, but did lose favor among geologists when synchronicity was found not to hold true.⁴⁷

Very important for our immediate discussion, therefore, is the now-recognized fact that there are no worldwide unconformities (either physical unconformities or fossil unconformities, for that matter) and, therefore, no worldwide time break within the main sedimentary deposits in the geologic column.

This means — and this is very important — that essentially *the entire sedimentary geologic column, all over the world, is a unit, deposited continuously from bottom to top without a significant time break*. It is a unitary phenomenon, and, therefore, must have a unitary cause.

We have already shown that catastrophism is now generally accepted even by most evolutionary geologists. That is, every unit in the geologic column was formed by some kind of “rare event” or “catastrophe”: a local flood, volcanic eruption, landslide, tsunami, or some other violent phenomenon.

Now, if every unit in the geologic column was produced by at least a local catastrophe, and all the units are connected through an essentially continuous deposition process, then the entire series must represent merely different local components of the same worldwide cataclysm. The whole is the sum of its parts.

Even though this chain of reasoning may appear simplistic, it is straightforward and seems compelling, if the assumptions on which it is based are valid. There are really only two assumptions: (1) every formation in the geologic column was formed rapidly, in some kind of catastrophic depositional environment; (2) there is no worldwide unconformity, or time gap in the sedimentary fossil-bearing geologic column.

Some die-hard uniformitarians would still question the first assumption, but, as documented above, more and more in the modern school of geologists are saying that everything in the geologic column is a record of catastrophe. Robert Dott, in his June 1982 presidential address to the Society of Economic Paleontologists and Mineralogists, said:

47 Amos Salvador, “Unconformity-Bounded Stratigraphic Units,” *Bulletin of the Geological Society of America*, vol. 98 (February 1987), p. 232. Salvador was writing as Chairman of the Geological Society’s International Subcommittee on Stratigraphic Classification.

The sedimentary record is largely a record of episodic events . . . episodicity is the rule, not the exception.⁴⁸

As far as the second assumption is concerned, practically all geologists would now agree that there are no worldwide unconformities in the so-called Phanerozoic part of the geologic column, but a few still would say that a global unconformity exists at the base of the Cambrian system, supposedly the oldest of the geological ages with multi-cellular life forms. In the Precambrian (Proterozoic Era) there are great thicknesses of sedimentary rocks, but for a long time it was believed that there were no fossils in these rocks. Later, many reports began to come in of different deposits of protozoan fossils (one-celled organisms) in the Precambrian, but many still maintained that there was a worldwide unconformity between the Precambrian and Cambrian.

In recent years, however, there have been several sites around the world where an odd assortment of soft-bodied multi-celled animals have been found in Precambrian rocks. These are known as the Ediacaran fauna, named after the Australian site where they were first discovered. A particularly significant site has also been found in eastern Siberia. In this region are located what so far are considered "the best sequences of rocks spanning the boundary, about 570 million years old, between the Cambrian and Precambrian geological periods."⁴⁹

A photograph of the site has the following caption:

These rocks along the Aldan River in Siberia span the boundary with little or no disruption, and clearly log the evolution of shelled animals and their soft-bodied antecedents.⁵⁰

The caption is unrealistic in one respect, however: there are no intermediate fossils between the Ediacaran soft-bodied animals and the shelled animals of the Cambrian. In fact, Adolph Seilacher of Germany, supported by Stephen Gould and others, have shown that the Ediacaran fossils were so different as to be completely unrelated to the later animals, dying off without descendants.⁵¹

But, in any case, the so-called unconformity *did not exist*, at least at this site in Siberia.

48 Robert Dott, *Geotimes* (November 1982), p. 16.

49 Cheryl Simon, "In With the Older," *Science News*, vol. 123 (May 7, 1983), p. 300.

50 Ibid.

51 Stephen J. Gould, *Natural History*, vol. 93 (February 1984), p. 15.

There is really no basis any longer for assuming an unconformity of worldwide extent anywhere, even at the Cambrian–Precambrian boundary. The example cited above could be augmented by many others:

In the 19th century the boundary between the Precambrian and the Cambrian was relatively easy to find, because the areas then under study showed major gaps or unconformities (representing an interval of time in which there was no preservation or deposition of rocks) between Precambrian and Cambrian sedimentary layers. The expanded data base available to 20th century paleontologists has actually complicated the task of locating the boundary precisely, because many regions are now known where Precambrian and Cambrian formations grade continuously into each other.⁵²

Now if the sediments of the Precambrian are continuous with those of the Cambrian, there is, indeed, no worldwide time break in the sediments of the geologic column. And, again, if there is no universal time gap in the geologic column, and if all individual formations represent intense depositional episodes (many geologists still don't like the word "catastrophe"), then the entire column must represent *one continuous intense depositional episode*, a one-of-a-kind "rare event." Instead of depicting the evolution of life over many ages, the sedimentary geologic column in the earth's crust really represents the *vast destruction and burial of life in one age*.

At the very least, this model ought to be given serious scientific consideration, as a possible alternative to the failed model of evolutionary uniformitarianism. The idea of long geologic ages is not at all needed, by all the factual evidences, to explain the phenomena of earth history.

This idea of long ages is so ingrained in modern opinion, however, that we need to study at some length the methods of geologic dating. And that is the subject of the next chapter.

52 Mark A. S. McMeramin, "The Emergence of Animals," *Scientific American*, vol. 256 (April 1987), p. 98.

Chapter 11

The Geologic Ages Are Vanishing

In earlier chapters, we have seen that vertically upward evolution has never been observed to occur in the present, and that the ubiquitous absence of transitional forms in the fossils indicates that it never occurred in the past. Furthermore, the laws of probability, of thermodynamics, and of causality show that evolution is impossible and that it will never occur in the future either. Finally, in these last two chapters, it will be shown that, even if it were possible, there has not been time enough for evolution to occur.

The only remaining argument for evolution is the long geological ages, which supposedly provide time for evolution. However, such tremendous spans of time depend completely upon the assumption of uniformitarianism. This assumption is invalid, however, as shown in the preceding chapter, and that fact is now recognized by most geologists. All the great rock strata, fossil beds, and other geological systems have been formed rapidly and catastrophically, not slowly and gradually over long ages.

Furthermore, it was shown in the last chapter that these catastrophes were all interconnected and continuous, with no worldwide time break, so that the entire fossiliferous geologic column was formed essentially during and following *one global cataclysm*. This cataclysm was primarily hydraulic in nature (that is, a worldwide flood), but was also accompanied by great volcanic, tectonic, and other geophysical phenomena.

All of this, in turn, brings the whole concept of geologic ages and billions of years of terrestrial and celestial antiquity into serious doubt.

Just why do scientists think that they know these ages ever existed? How do they arrive at billions of years for the antiquity of the earth, and how do cosmophysicists arrive at an even greater age for the universe?

To the creationist the answer to these questions is that evolutionists are repeatedly making *ad hoc* assumptions to try to justify an atheistic evolutionary world view, and that the pseudo-rationale for all these assumptions is the discredited premise of uniformitarianism. Even a few evolutionary geologists let an acknowledgment slip every now and then that this is all founded on speculation.

The fact that the calculated age of the earth has increased by a factor of roughly 100 between the year 1900 and today — as the accepted “age” of the earth has increased from about 50 million years in 1900 to at least 4.6 eons today — certainly suggests we clothe our current conclusions regarding time and the earth with humility.¹

The author of this cautionary statement was a distinguished geologist, professor of geology at the California Institute of Technology and the Scripps Institute of Oceanography. He went on to say:

We will speculate a lot about the first eon or more of earth’s history . . . but in the foreseeable future it will be mostly speculations — essentially geopoetry.²

Although Dr. Engel’s critique was published more than a quarter century ago, nothing really has changed. When one of the writers (H. Morris) was just a young instructor some 50 years ago, the scientific books and articles on this subject agreed that there were some six independent lines of evidence (radioactive decay, expanding universe, etc.) that converged on a date of about two billion years for the age of both the earth and the cosmos. Now, of course, the “age” of the earth is 4.6 billion years, and that of the universe about 18 billion years. (Perhaps this is a clue to the great age of the writer!) But note the honest conclusion of Professor Engel:

The most honest concede freely we know almost nothing of the earth or its processes.³

1 A. E. J. Engel, “Time and the Earth,” *American Scientist*, vol. 57 (Winter 1969), p. 461.

2 *Ibid.*, p. 462.

3 *Ibid.*, p. 480.

In any case, the continual insistence of evolutionists that “we know” the earth is billions of years old is unwarranted. There is a great deal of good scientific evidence that the earth is *far too young* for evolution to be a feasible option in explaining origins.

Before discussing the question of “absolute age,” however, we need to look first at the “relative ages,” as implied in the evolution-based geologic column. That is, just how do evolutionists know (or *think* that they know) that a given rock or fossil is of Cambrian age or Jurassic or Tertiary or something else?

Circular Reasoning in Geology

So we ask the question. Suppose we find a certain rock formation that interests us, and we would like to know how to go about determining the geologic age in which it was formed. We go to the encyclopedia to get the answer:

Paleontology (the study of fossils) is important in the study of geology. The age of rocks may be determined by the fossils found in them.⁴

That sounds simple enough. All we have to do now is find some fossils in the rock, and that will tell us how old it is.

But how do fossils tell us the age? Somehow we must first know the age when those fossils lived. How do we do that? We go again to the same encyclopedia, to an article written by the very same paleontologist. Here is how he says to do that.

Scientists determine when fossils were formed by finding out the age of the rocks in which they lie.⁵

This is becoming confusing! Still another article, in the same encyclopedia, tells us again how to know the age of the rocks, so that they can tell us the age of their fossils.

Fossils help geologists figure out the ages of rock strata and the times at which plants and animals lived.⁶

4 Samuel Paul Welles, Article on “Paleontology,” *World Book Encyclopedia*, vol. 15 (1978), p. 85. Welles was a research scientist in the Museum of Paleontology at the University of California at Berkeley.

5 Samuel Paul Welles, Article on “Fossils,” *World Book Encyclopedia*, vol. 7 (1978), p. 364.

6 Samuel P. Ellison, Jr., Article on “History of the Earth,” *World Book Encyclopedia*, vol. 6 (1978), p. 16d. Ellison was Professor of Geological Science at the University of Texas.

Isn't there some way out of this circle of reasoning? Rocks give us the age of the fossils, and the fossils tell us the age of the rocks. But surely there must be a starting place somewhere!

And indeed there is. The key is the *assumption* of evolution.

The age does not depend on radiometric dating, as is obvious from the fact that the geologic-age system had been completely worked out and most major formations dated before radioactivity was even discovered. Neither does the age depend upon the mineralogic or petrologic character of a rock, as is obvious from the fact that rocks of all types of composition, structure, and degree of hardness can be found in *any* "age." It does not depend upon vertical position in the local geologic strata, since rocks of any "age" may, and do, rest horizontally and conformably on rocks of any other age. No, a rock is dated *solely* by its fossils.

The only chronometric scale applicable in geologic history for the stratigraphic events exactly is furnished by the fossils. Owing to the irreversibility of evolution, they offer an unambiguous time scale for relative age determinations and for worldwide correlations of rocks.⁷

Obviously, fossils could be distinctive time-markers only if the various kinds each had lived in different ages. But how can we know which fossils lived in which ages? No scientists were there to observe them, and true *science* requires *observation*. Furthermore, by analogy with the present (and uniformitarianism is supposed to be able to decipher the past in terms of the present), many different kinds of plants and animals are living in the present world, including even the "primitive" one-celled organisms with which evolution is supposed to have begun. Why, therefore, is it not better to assume that all major kinds also lived together in past ages as well? Some kinds, such as the dinosaurs, have become extinct, but practically all present-day kinds of organisms are also found in the fossil world.

The only reason for thinking that different fossils should represent different ages is the assumption of evolution. If evolution is really true, then, of course, fossils should provide an excellent means for identifying the various ages, an "unambiguous time scale," as Schindewolf put it. Hollis Hedberg, former president of the Geological Society of America, adds his own confirmation that evolution is the key, as follows:

7 O.H. Schindewolf, "Comments on Some Stratigraphic Terms," *American Journal of Science*, vol. 255 (June 1957), p. 394. Derek Ager also says that "fossils have been and still are the most accurate method of dating and correlating the rocks in which they occur" (*New Scientist*, vol. 100, November 10, 1983), p. 425.

Fossils have furnished, through their record of the evolution of life on this planet, an amazingly effective key to the relative positioning of strata in widely separated regions, and from continent to continent.⁸

The use of fossils as time-markers thus depends completely on “their record of evolution.” But, then, how do we know that *evolution* is true? Why, because of the fossil record!

Fossils provide the only historical, documentary evidence that life has evolved from simpler to more and more complex forms.⁹

So, the only *proof* of evolution is based on the *assumption* of evolution! The system of evolution arranges the fossils, the fossils date the rocks, and the resulting system of fossil-dated rocks proves evolution! Around and around we go.

How much more simple and direct it would be to explain the fossil-bearing rocks as the record in stone of the destruction of the ancient world by one great flood. The various fossil assemblages represent, not evolutionary stages developing over many ages, but, rather, ecological habitats in various parts of the world in one age.

Fossils of marine invertebrate animals are normally found at the lower elevations in each local geologic column, for the simple reason that they live at the lowest elevations and would be first affected and buried in a global cataclysm. Fossils of birds and mammals are found only at the higher elevations because they live at higher elevations, are lower in weight density, more mobile, and could escape burial longer. Human fossils are extremely rare because men would only very infrequently be trapped and buried in flood sediments at all because of their high mobility. The sediments of the “ice-age” at the highest levels are evidence of the drastically changed climate that would be caused by such a global cataclysm.

The flood theory of geology, which was so obvious and persuasive to the founders of geology, is thus once again beginning to be recognized as the only theory that is fully consistent with the actual *facts* of geology.

As suggested above, creationists have long insisted that the main evidence for evolution — the fossil record — involves a serious case of circular reasoning. That is, the fossil evidence that life has evolved from

8 H. D. Hedberg, “The Stratigraphic Panorama,” *Bulletin of the Geological Society of America*, vol. 72 (April 1961), p. 499.

9 C. O. Dunbar, *Historical Geology* (New York: Wiley, 1960), p. 47.

simple to complex forms over the geological ages depends on the geological ages of the specific rocks in which these fossils are found. The rocks, however, are assigned geologic ages *based on* the fossil assemblages which they contain. The fossils, in turn, are arranged on the *basis of* their assumed evolutionary relationships. Thus, the main evidence for evolution is based on the *assumption* of evolution!

A significant development in recent years has been the fact that many evolutionary geologists are now also recognizing this problem. They no longer ignore it or pass it off with a sarcastic denial, but they admit that it is a real problem that deserves a serious answer.

The use of “index fossils” to determine the geologic age of a formation, for example, was discussed in an interesting way in an important paper by J. E. O’Rourke.

These principles have been applied in *Feinstratigraphie*, which starts from a chronology of index fossils, and imposes them on the rocks. Each taxon represents a definite time unit and so provides an accurate, even “infallible” date. If you doubt it, bring in a suite of good index fossils, and the specialist without asking where or in what order they were collected, will lay them out on the table in chronological order.¹⁰

That is, since evolution always proceeds in the same way all over the world at the same time, index fossils representing a given stage of evolution are assumed to constitute infallible indicators of the geologic age in which they are found. This makes good sense and would obviously be the best way to determine relative geologic age — if, that is, we knew infallibly that evolution were true!

But how do we know that? There is such a vast time scale involved that no one can actually observe evolution taking place.

That a known fossil or recent species, or higher taxonomic group, however primitive it might appear, is an actual ancestor of some other species or group, is an assumption scientifically unjustifiable, for science never can simply assume that which it has the responsibility to demonstrate. . . . It is the burden of each of us to demonstrate the reasonableness of any hypothesis we might care to erect about ancestral conditions, keeping in mind

¹⁰ J. E. O’Rourke, “Pragmatism versus Materialism in Stratigraphy,” *American Journal of Science*, vol. 276 (January 1976), p. 51.

that we have no ancestors alive today, that in all probability such ancestors have been dead for many tens of millions of years, and that even in the fossil record they are not accessible to us.¹¹

There is, therefore, really no way of proving scientifically any assumed evolutionary phylogeny, as far as the fossil record is concerned.

Likewise, paleontologists do their best to make sense out of the fossil record and sketch in evolutionary sequences or unfossilized morphologies without realistic hope of obtaining specific verification within the foreseeable future.¹²

It would help if the fossil record would yield somewhere at least a few transitional sequences demonstrating the evolution of some kind of organism into some other more complex kind. So far, however, it has been uncooperative, as discussed earlier.

The abrupt appearance of higher taxa in the fossil record has been a perennial puzzle. . . . If we read the record rather literally, it implies that organisms of new grades of complexity arose and radiated relatively rapidly.¹³

Transitions are well-documented, of course, at the *same* levels of complexity — within the “kinds,” that is — but never into “new grades of complexity.” *Horizontal* changes, however, are not really relevant to the measure of geologic time, since such changes occur too *rapidly* (e.g., the development of numerous varieties of dogs within human history) to be meaningful on the geologic time scale, and are reversible (e.g., the shift in the population numbers of the peppered moth of England from light-colored to dark-colored and back again).

Thus, *vertical* evolutionary changes in fossils are essential to real geologic dating, but they are impossible to prove. They must simply be assumed.

The dating of the rocks depends on the evolutionary sequence of the fossils, but the evolutionary interpretation of the fossils depends on the dating of the rocks. No wonder the evolutionary system, to thoughtful outsiders, implies circular reasoning.

11 Gareth V. Nelson, “Origin and Diversification of Teleostean Fishes,” *Annals* (New York Academy of Sciences, 1971), p. 27.

12 Donald R. Griffin, “A Possible Window on the Minds of Animals,” *American Scientist*, vol. 64 (September/October 1976), p. 534.

13 James W. Valentine and Cathryn A. Campbell, “Genetic Regulation and the Fossil Record,” *American Scientist*, vol. 63 (November/December 1975), p. 673.

Are the authorities maintaining, on the one hand, that evolution is documented by geology and, on the other hand, that geology is documented by evolution? Isn't this a circular argument?¹⁴

The intelligent layman has long suspected circular reasoning in the use of rocks to date fossils and fossils to date rocks. The geologist has never bothered to think of a good reply, feeling the explanations are not worth the trouble as long as the work brings results. This is supposed to be hard-headed pragmatism.¹⁵

The main "result" of this system, however, is merely the widespread acceptance of evolution. But uniformitarian assumptions and evolutionary geology are altogether useless in locating oil or other economically useful deposits. Perhaps, however, geologists feel that, since biologists have already proved evolution, they are justified in assuming it in their own work. But biologists in turn have *simply assumed evolution to be true*.

But the danger of circularity is still present. For most biologists the strongest reason for accepting the evolutionary hypothesis is their acceptance of some theory that entails it. There is another difficulty. The temporal ordering of biological events beyond the local section may critically involve paleontological correlation, which necessarily presupposed the non-repeatability of organic events in geologic history. There are various justifications for this assumption but for almost all contemporary paleontologists it rests upon the acceptance of the evolutionary hypothesis.¹⁶

And, as far as the "ordering of biological events beyond the local section is concerned," O'Rourke reminds us again:

Index fossils . . . are regarded as the features most reliable for accurate, long-distance correlations.¹⁷

14 Larry Azar, "Biologists, Help!" *Bioscience*, vol. 28 (November 1978), p. 714.

15 J. E. O'Rourke, "Pragmatism versus Materialism in Stratigraphy," p. 48.

16 David B. Kitts, "Paleontology and Evolutionary Theory," *Evolution*, vol. 28 (September 1974), p. 466.

17 J. E. O'Rourke, "Pragmatism versus Materialism in Stratigraphy," p. 48.

As mentioned earlier, more and more modern geologists are now recognizing the existence of circular reasoning in their geological methodologies. Among these, in addition to those already mentioned, is Dr. Derek Ager, former president of the British Geological Association.

It is a problem not easily solved by the classic methods of stratigraphical paleontology, as obviously we will land ourselves immediately in an impossible circular argument if we say, firstly that a particular lithology is synchronous on the evidence of its fossils, and secondly that the fossils are synchronous on the evidence of the lithology.¹⁸

In another article, Dr. Ager, who was also head of the geology department at Swansea University, notes the problem involved in trying to use minor differences in organisms (that is, what creationists would call *horizontal changes* or *variations*) as time markers.

We all know that many apparent evolutionary bursts are nothing more than brainstorming on the part of particular paleontologists. One splitter in a library can do far more than millions of years of genetic mutation.¹⁹

It would seem that this innovative tendency would lead to great uncertainty in the use of extinct marine organisms (about whose intra-specific variability while they were living we know nothing whatever) as index fossils.

Another geologist who recognized the circulatory problem was Dr. Ronald West at Kansas State University, who noted:

Contrary to what most scientists write, the fossil record does not support the Darwinian theory of evolution because it is this theory (there are several) which we use to interpret the fossil record. By doing so, we are guilty of circular reasoning if we then say the fossil record supports this theory.²⁰

18 Derek V. Ager, *The Nature of the Stratigraphic Record*, 3rd ed. (New York: John Wiley and Sons, 1993), p. 98.

19 Derek V. Ager, "The Nature of the Fossil Record," *Proceedings of the Geological Association*, vol. 87, no. 2 (1976), p. 132.

20 Ronald R. West, "Paleontology and Uniformitarianism," *Compass*, vol. 45 (May 1968), p. 216.

Still another comment on the circular reasoning process involved in developing paleontological sequences appears in an important symposium paper.

The prime difficulty with the use of presumed ancestral-descendant sequences to express phylogeny is that biostratigraphic data are often used in conjunction with morphology in the initial evaluation of relationships, which leads to obvious circularity.²¹

In view of such admissions from many leading evolutionists, it is clear that there neither is, nor can be, any *proof* of evolution. The evidence for evolution is merely the assumption of evolution! The most extensive discussion of the circular-reasoning problem in evolutionary geology is probably the paper by O'Rourke.²² Although he attempts to explain and justify the process as being based on induction from observed field data, he does admit many important problems in this connection. With reference to the geologic column and its development, he says:

Material bodies are finite, and no rock unit is global in extent, yet stratigraphy aims at a global classification. The particulars have to be stretched into universals somehow. Here ordinary materialism leaves off building up a system of units recognized by physical properties, to follow dialectical materialism, which starts with time units and regards the material bodies as their incomplete representatives. This is where the suspicion of circular reasoning crept in, because it seemed to the layman that the time units were abstracted from the geological column, which has been put together from rock units.²³

The fiction that the geological column is actually represented by real rock units in the field has long been abandoned, of course.

By mid-19th century, the notion of "universal" rock units had been dropped, but some stratigraphers still imagine a kind of global biozone as "time units" that are supposed to be ubiquitous.²⁴

21 B. Schaeffer, M. K. Hecht, and N. Eldredge, "Phylogeny and Paleontology," Ch. 2 in *Evolutionary Biology*, vol. 6, eds. Th. Dobzhansky, M. K. Hecht, and W. C. Steere (New York: Appleton-Century-Crofts, 1972), p. 39.

22 J. E. O'Rourke, "Pragmatism versus Materialism in Stratigraphy," p. 47–55.

23 Ibid., p. 49.

24 Ibid., p. 50.

Behind all such assumed time units is the doctrinaire assumption of evolution, which is the basic component of materialism.

The theory of dialectic materialism postulates matter as the ultimate reality, not to be questioned. . . . Evolution is more than a useful biologic concept: it is a natural law controlling the history of all phenomena.²⁵

And if physical data in the field seem in any instance to contradict this assumed evolutionary development, then the field data can easily be reinterpreted to correspond to evolution! This is always possible in circular reasoning.

Structure, metamorphism, sedimentary reworking, and other complications have to be considered. Radiometric dating would not have been feasible if the geologic column had not been erected first. . . . The axiom that no process can measure itself means that there is no absolute time, but this relic of the traditional mechanics persists in the common distinction between “relative” and “absolute” age.²⁶

In this exposition, O’Rourke decries the common reliance on an implicit circular argument that he attributes to the assumption of dialectical materialism, and he urges his colleagues to deal pragmatically with the actual stratigraphic rock units as they occur in the field, in confidence that this will eventually correlate with the global column that was built up gradually by similar procedures used by their predecessors.

He does recognize, however, that if the actual physical geological column is going to be used as a time scale, it is impossible to avoid circular reasoning:

The rocks do date the fossils, but the fossils date the rocks more accurately. Stratigraphy cannot avoid this kind of reasoning if it insists on using only temporal concepts, because circularity is inherent in the derivation of time scales.²⁷

Although the above references are 20 years old, they are not outdated, for this method of geological “dating” has been in use for more than 100 years and is still standard. Rocks are assigned a geologic age based

25 Ibid., p. 51.

26 Ibid., p. 54.

27 Ibid., p. 53.

essentially on the assumed stage-of-evolution of their fossils. Such a method, of course, has to presume that evolution is a known fact, and that its various stages, with their respective forms of life, are already settled.

But how could all this be known, if it all took place millions of years ago? As we have seen, there is no evidence of any vertical evolution occurring today, nor are there any evolutionary intermediates in the billions of known fossils from the past.

As hard as it may be to believe at this late date, the fact is that most of these imaginary evolutionary stages were originally developed deductively in the early 19th century by studies of comparative morphology and physiology of existing animals, especially utilizing inferences drawn from Ernst Haeckel's infamous "recapitulation theory." Stephen Gould referred to this fact as follows in his study of the racist implications of this theory:

In Down's day, the theory of recapitulation embodied a biologist's best guide for the organization of life into sequences of higher and lower forms.²⁸

But the recapitulation theory has long since been proved false, so how could it have been a reliable guide for determining evolutionary sequences? Many people, of course, have maintained that the fossil record gives an actual documented history of evolution. But we have just seen that the so-called fossil record is based on the assumption of evolution, and it is then used to date the rocks to provide the framework of "history" in which to interpret and correlate those rocks as an evolutionary series. And thereby, of course, the fossils have been neatly ordered in the same "evolutionary series" in which they have already arranged the rocks!

As previously noted, creationists have long argued that this is circular reasoning, and we are glad that evolutionists are finally admitting it. Raup says, for example:

The charge that the construction of the geologic scale involves circularity has a certain amount of validity. . . . Thus, the procedure is far from ideal and the geologic ranges of fossils are constantly being revised (usually extended) as new occurrences are found.²⁹

28 Stephen Jay Gould, *Natural History* (April 1980), p. 144.

29 David M. Raup, "Geology and Creation," *Field Museum of Natural History Bulletin*, vol. 54 (March 1983), p. 21.

One portion of the geological time scale was, however, supposedly developed by a sort of inductive process from actual fossil deposits in the rocks. The most recent of the geologic eras, the Cenozoic (involving the Tertiary and Quaternary Periods) was subdivided by Sir Charles Lyell in the early part of the 19th century, by a method that was supposed to be quantitative. A leading modern paleontologist and his colleagues have described this process as follows:

In about 1830, Charles Lyell . . . developed a biostratigraphic technique for dating Cenozoic deposits based on relative proportions of living and extinct species of fossil mollusks. . . . Strangely, little effort has been made to test this assumption. This failure leaves the method vulnerable to circularity. When Lyellian percentages alone are used for dating, it remains possible that enormous errors will result from spatial variation in the temporal pattern of extinction.³⁰

Lyell made his original studies almost exclusively on the rocks of the Paris Basin in France, so it was presumptuous and invalid to apply this all over the world. As Stanley and his associates point out:

One source of error for Lyellian data that may, in general, bias estimates of extinction rates is a failure to recognize living representatives of some fossil species.³¹

These and other problems were real fallacies. The authors conclude:

Thus our analysis casts doubt on the universal utility of the Lyellian dating method, even for faunas at a single province.³²

These Tertiary and Quaternary subdivisions actually represent the most systematic attempt to develop a truly “inductive” (that is, “erected step-by-step from actual data in the field”) technique for organizing a portion of the geological-age system. This is the most “recent” part of the time scale and, thus, presumably, the clearest and best preserved. Yet it did not work even here. The larger divisions, based on the recapitulation theory and other subjective criteria, are, therefore, even *less* reliable.

30 Steven M. Stanley, Warren O. Addicott, and Kujotaka Chinzei, “Lyellian Curves in Paleontology: Possibilities and Limitations,” *Geology*, vol. 8 (September 1980), p. 422.

31 *Ibid.*, p. 424.

32 *Ibid.*, p. 425.

Yet geologists still use it. Raup explains:

In spite of this problem, the system does work! The best evidence for this is that the mineral and petroleum industries around the world depend upon the use of fossils in dating. . . . I think it quite unlikely that the major mineral and petroleum companies of the world could be fooled.³³

Evidently, even such a careful and competent geologist as Dr. Raup can apparently be fooled, however. Oil companies use fossils (actually micro-fossils) only to trace out a given formation in a given region. They could hardly be used to locate oil-bearing rocks associated with a particular geological age, since oil is found in rocks of *all* ages! Actually, oil geologists and other economic geologists do their prospecting for new deposits on the basis of geometric and geophysical criteria, not paleontological assumptions.

And *whatever* they use, it is surely wishful thinking to boast that “the system does work,” only about 1 out of 40 (very costly) wildcat oil wells discovers a new pool!

The bottom line is that the geological ages of rocks depend on the assumption of evolution, and that assumption is wrong! That being the case, there is no objective way to determine the geological age of a rock or fossil deposit. Consequently, for all that can be proved to the contrary, they could all well be of essentially the *same* age!

The Supposed Order of the Fossils

The foregoing discussion has shown that there is no way to tell the geologic age of rocks and their fossils, except on the assumption of evolution. Since there is no real evidence for evolution except the supposed geologic ages of the rocks and fossils, there is no reason *not* to conclude that all the rocks and fossils might have the *same* geologic age. This implication correlates with the compelling evidence that all such rocks have a catastrophic origin, and that all the individual catastrophes were connected and continuous components of a global hydraulic cataclysm. Instead of representing the evolution of life over many ages, the rocks and fossils represent the global destruction of life in one age.

An obvious question, however, involves the general order of the strata in the geologic column. Even though the entire geologic column may have been deposited in one great hydraulic-based cataclysm, why are the fossils arranged in a vertical order that at least *looks* like evolution? Why

33 David M. Raup, “Geology and Creation,” p. 21.

are there different forms of life found as fossils in the different rock systems that evolutionists have attributed to different ages?

The answer is twofold. In the first place, the supposed order is to a considerable extent artificial, since each local geological column varies from every other, and since each local column never constitutes more than a very small fraction of the total column. In the second place, such order as does exist is mainly an order of ecological zonation, and is exactly what a great flood would cause.

It is significant that every one of the great phyla and most of the classes of the animal kingdom appear in the Cambrian rocks, supposed by evolutionists to be the oldest of the fossil-producing geological ages. All the animals preserved in these rocks are marine animals, reflecting the marine fauna that lived in the pre-Flood oceans — and, therefore, normally were buried most deeply in the flood sediments. They comprise the same phyla and classes that live in the present oceans, except for some that have apparently become extinct, and they often are animals practically identical with living types (sponges, starfish, jellyfish, etc.).

Evolutionists used to claim that the vertebrates did not evolve until 60 million years or so after the Cambrian period. Now, however, even vertebrates (specifically fishes) have been found in Cambrian rocks.

Until recently, vertebrates have been known from rocks no older than the Middle Ordovician (about 450 million years ago). In 1976 and 1977 the known range of the vertebrates was extended about 20 million years by discoveries of fish fossils in rocks of latest Early Ordovician and earliest Middle Ordovician age in Spitzbergen and Australia. This report of fish material from Upper Cambrian rocks further extends the record of the vertebrates by approximately another 40 million years.³⁴

If practically *all* the animal classes and phyla are found in *all* the geologic “ages,” or more accurately, the rock systems of the geologic column, there is very little left of even a superficial appearance of evolution.

Furthermore, ecological zonation accounts for what may still appear to be a semblance of evolutionary development in any local geological column. That is, the vertical order in the rocks (to the extent that any order exists at all) is usually from marine invertebrates at the lowest elevations to

³⁴ John E. Rapetski, “A Fish from the Upper Cambrian of North America,” *Science*, vol. 200 (May 5, 1978), p. 529.

marine vertebrates, then amphibians (at the interface between land and sea in the pre-Flood world), then reptiles, mammals, birds, and men. This is essentially the order of increasing elevation in the ecological habitat. It does *not* represent evolution at all, though it has long been so interpreted. Some evolutionists are now recognizing the validity of this concept:

It is worth mentioning that continuous “evolutionary” series derived from the fossil record can in most cases be simulated by chronoclines — successions of a geographic cline population imposed by the changes of some environmental gradients.³⁵

Whether we are able yet to sort out all the details of every local geological column in the context of a global flood model, however, the important point is that the entire geological column really bears witness to *continuous catastrophism*.

Anomalies in the Evolutionary Order

There are, indeed, many evidences that the basic forms of life have been essentially the same throughout all the geologic ages, with the exception of the many types that have become extinct. The same is true of the physical constituents of the rocks: the petrologic types, the minerals, the faults, and other features. There is really nothing in either the physical or paleontological components of the rocks that would necessarily require identification of rocks as belonging to different ages.

In addition to that very basic fact, there also exist many anomalous deposits in the sedimentary column that make it still more difficult to believe in the standard geologic ages. One of these is the frequent occurrence of fossils that are found in deposits that contradict the “official” evolutionary order. This phenomenon is more or less brushed off with the term “stratigraphic disorder.”

Any sequence in which an older fossil occurs above a younger one is stratigraphically disordered. Scales of stratigraphic disorder may be from millimeters to many meters. . . . Stratigraphic disorder at some scale is probably a common feature of the fossil record.³⁶

Evolutionists can, of course, explain away such anomalies by various hypothetical “mixing” processes that rework the sediments after initial

35 V. Krassilov, “Causal Biostratigraphy,” *Lethaia*, vol. 7, no. 3 (1974), p. 174.

36 Alan H. Cutler and Karl W. Plessa, “Fossils Out of Sequence: Computer Simulations and Strategies for Dealing with Stratigraphic Disorder,” *Palaaios*, vol. 5 (June 1990), p. 227.

deposition, whether or not these are evident in the sedimentary environments themselves. At any rate, such “out-of-order” deposits are common, and do pose a problem for those whose presuppositions would require them to assume different depositional ages.

The extent of disorder in modern and ancient sediments is not well documented; however, the widespread occurrence of anomalies in dated sections suggest that disorder should be taken seriously by paleobiologists and stratigraphers working at fine stratigraphic scales.³⁷

Not only are there many places where fossils from different ages are found out of order, or even mixed together, but there are also numerous locations around the world where entire formations are apparently missing or even inverted.

Practically every local column has examples of “missing ages” in the sequences, many of which are replaced by what are wishfully called “paraconformities,” with the missing ages evident only because of the missing fossils, but with no unconformity present to signal a period of erosion. Even more significant are the many examples of “reversed ages,” and “old” formations resting conformably on “young” formations.

The most basic rule of stratigraphy (the study of the sequences of “strata,” or layers, in the rocks) is that sedimentary rock formations on the bottom are older than those on the top. Sedimentary rocks are formed by the erosion, transportation, and deposition of sediments, and nothing could be more obvious than the fact that deposits on top were laid down after the sediments below them. However, this common sense rule often seems not to work in the presupposed evolutionary scenario.

In many places, the oceanic sediments of which mountains are composed are inverted, with the older sediments lying on top of the younger.³⁸

If this is the case, then how did the geological authorities ever decide that the bottom rocks were younger? The answer is that, as already discussed, they are dated by the fossils!

For true believers in evolution, it may be logical to date rocks this way, even when this requires devising a method for explaining how the

³⁷ Ibid., p. 234.

³⁸ *Science News*, vol. 98 (October 17, 1970), p. 316.

sediments got out of order. Since, however, we do not observe evolution taking place today, one must ask how they can be so confident that evolution was true in the past. The “answer” is that the evolutionary history of life is revealed by the fossil record in the sedimentary rocks. Dr. Pierre P. Grassé who for more than 20 years held the Chair of Evolution at the Sorbonne in Paris, one of the world’s leading universities, has noted this fact:

Naturalists must remember that the process of evolution is revealed only through fossil forms.³⁹

That is, ancient rocks just *have* to contain fossils of organisms in an early stage of evolution; younger rocks are bound to contain fossils representing a more advanced stage of evolution. We “know,” of course, which rocks are ancient, because they are the ones on the bottom, with the younger ones on top. But, then, we have just noted that there are many places where this order is reversed. We “know” that they are reversed because of the evolutionary stages of their respective fossils.

Now, if one again senses a feeling of dizziness at this point, it is because we are once again going in circles. Maybe it will help settle our queasiness if we find some *actual physical evidence* that these gigantic old rock blocks have really ridden up and over (over-thrust) the younger ones. We would expect to find, if this is true, a tremendous amount of rock breakage (brecciation) and ground-up rock powder at the interface, along with deep grooves and scratches (striations) along the undersurface, and a general mixture of the upper and lower rocks along the thrust plane. Is this what is found?

Not usually. Usually, the contact surface is sharp and well-defined, with the older rocks on top of the younger, often with many expected “ages” missing in between.

The following observations about “overthrusts” seem to have universal validity: 1. The contact is usually sharp and impressive in view of the great amount of displacement. . . . 5. Minor folding and faulting can usually be observed in both the thrust plate and the underlying rocks. The intensity of such deformations is normally comparatively weak, at least in view of the large displacements these thrust plates have undergone.⁴⁰

39 Pierre P. Grassé, *Evolution of Living Organisms* (New York City, NY: Academic Press, 1977), p. 4.

40 P. E. Gretener, *Bulletin of Canadian Petroleum Geology*, vol. 25 (1977), p. 110.

It is true, of course, that some “overthrusts” do exhibit evidence of brecciation and other such indicators of relative movement. Does this not prove that they are really overthrusts?

Not at all — at least not necessarily. Many types of movement may occur besides overthrusting.

Late deformations, particularly by normal faulting, are present in many thrust plates. They should be recognized for what they are: post-thrusting features completely unrelated to the emplacement of the thrust plates.⁴¹

Then what deformations can be identified with confidence as caused by the thrust itself? The author of the above quotation says that “basal tongues” from the lower plate are often injected into the base of the overthrust plate, and that these sometimes merge together. Also secondary “splay” thrusts may be found.

But now suppose that all these physical phenomena — brecciation, rock powder, striations, basal tongues, splay thrusts, etc., that a real overthrust would produce — are actually present, does this finally prove that the rocks have really been moved out of their original depositional order?

Of course not. Such phenomena merely prove that the upper block has moved *somewhat* with respect to the lower block. This is quite common, even with formations in the “correct” sedimentary order, resulting from the different physical properties and times of deposition of the two formations, and proves nothing whatever about overthrusting!

Admittedly, such phenomena do not *rule out* the possibility of overthrusting, as their absence might do. They are necessary, but not sufficient, conditions for overthrusting. More evidence is needed: notably, evidence of the “roots” from which the alleged thrust block was derived, along with evidence that its *incredible journey* was physically possible.

Are the sources of the overthrust plates usually discernible? Only rarely, and with much speculation. Furthermore, in most cases, there are not any genuine evidences of overthrusting at all.

Different lithological units, usually with stratigraphic separation measured in kilometers, are in juxtaposition along a sharp contact, often no more impressive than a bedding plane.⁴²

⁴¹ Ibid.

⁴² Ibid., p. 111.

Why, then, could it not be a simple bedding plane? And how do geologists explain the incredible forces and motions in the earth that can accomplish the remarkable feat of moving a gigantic mass of rock great distances up and over another great rock formation? Titanic compressive forces and rock strengths must be generated, and tremendous frictional forces overcome, before such an operation could ever be accomplished! The mechanism of the presumed phenomenon has always been mysterious, however, and some of the most competent geophysicists have said it was impossible.

In 1959, however, William Rubey and M. King Hubbert felt that they had solved the problem, proposing that water trapped in the pores of the sediments as they were deposited, gradually became so compressed with the accumulating overburden that they developed “geostatic” pressures, capable actually of *floating* the formation above into location.⁴³

This suggestion was enthusiastically accepted by most geologists, and, for nearly three decades, was by far the most widely adopted solution to the overthrusting problem.

It is obvious, however, that these very high pore pressures can be maintained only if (1) the pores in the rock section near the interface are inter-connected, so that the pressure will be applied over the entire base of the floating slab, (2) the permeability of the cap rock is so low that it provides an effective seal against the water’s escaping under the high pressure gradient to which it is subjected, and (3) this seal is maintained throughout the movement.

This is a highly unlikely combination of circumstances, however, and some geologists recognize it to be a serious fallacy in such a proposed solution.

At high enough pressure and temperatures, plastic flow will certainly reduce pore space inter-connectivity. To be effective mechanically, pore space must be inter-connected pore space; it is not clear that this is always the case during metamorphism. . . . Our preliminary results suggest that the effective permeability of the upper plate must be on the order of 10^{-3} mD or less for gravity gliding to be feasible. Otherwise, the fluid will leak away from the zone of decollement before pore pressure can reach the levels needed for gravity gliding.

⁴³ William Rubey and M. King Hubbert, *Bulletin of Geological Society of America*, vol. 70 (February 1959), p. 155–166.

Although *in situ* rock permeabilities are poorly known, the few existing measurements suggest that effective permeabilities as low as 10^{-3} mD are rare in the geologic column.⁴⁴

But suppose that, in some cases, rocks such as shales and evaporites do have sufficiently low permeabilities to seal off the high pressure zone. Now the problem becomes one of rock strength — the pressures become so high as to fracture the rocks!

When the pore fluid pressure exceeds the least compressive stress, fractures will form normally to that stress direction . . . we suggest that pore pressure may never get high enough to allow gravity gliding as envisaged by Hubbert and Rubey.⁴⁵

If fractures develop, of course, this increases the permeability, and the water flows out, lowering the pressure and stalling any incipient flotation. Furthermore, it is simply inconceivable that these huge (often many miles long, wide and thick) slabs of rock could traverse the long distances necessary without fractures developing from other causes as well. There seems no way to avoid escape of pore water through at least *some* fractures. By Pascal's law, if the pressure is lowered *at any point* in a continuous water body, it must drop by the same amount throughout the entire body. The whole scenario seems impossible, hydraulically, over any significant distances.

We suspect that over the areas of large thrust sheets such as those in the Appalachians or the Western Cordillera, effective permeabilities would have been too large to allow gravity gliding, even with shale or evaporite cap rocks.⁴⁶

Therefore, it begins to appear that overthrusting by floating is impossible on any noteworthy scale. But this is not quite the last resort of those who must salvage the evolutionary order in the rocks at all costs.

Simple gravity gliding under the influence of elevated pore pressure cannot explain the Heart Mountain fault. . . . Pierce has suggested a catastrophic genesis for the Heart Mountain allochthon.⁴⁷

44 J.H. Willemin, P.L. Guth, and K.V. Hodges, *Geology* (September 1980), p. 405.

45 *Ibid.*, p. 406.

46 P.L. Guth, K.V. Hodges, and J.H. Willemin, *Geological Society of America Bulletin* (July 1982), p. 611.

47 *Ibid.*

William Pierce⁴⁸ studied the Heart Mountain “over-thrust” (Paleozoic over Eocene) for many years. Originally, he thought it was caused by simple gravity sliding, but this proved impossible mechanically. Then it was suggested that the mechanism might have involved the Hubbert and Rubey fluid-pressure concept. When he found that that did not work either, he invoked catastrophism, and catastrophism with a vengeance, postulating an *explosive* transplantation of the thrust blocks! Catastrophic events, however, obviously can neither be observed in process nor modeled in the laboratory:

Catastrophic processes are beyond the scope of this analysis.⁴⁹

One can *believe* in catastrophic overthrusting if his motivation to do so is sufficiently strong, of course. If evolutionists want to retain their cherished evolutionary sequences, therefore, they must do so only by faith in catastrophism. Floating rock formations won’t float!

Thus, the supposed “order of the fossils” in the geologic column is really not much of an order at all. There are numerous examples of out-of-order fossils, as well as entire regional formations out of order. Even when everything is in the “correct” order according to evolutionary theory, there are — more often than not — whole missing “ages” in local geologic columns. All these anomalies require various *ad hoc* explanations as to how they got that way. If, however, all the “ages” were really the *same age*, and if all the now-fossilized plants and animals were actually *living contemporaneously* in that age, then the anomalies are not anomalous any more.

And even when they are all in the proper order in a given locality, Gould and others have pointed out that still there is no evolutionary “vector of progress” evident in the column. To the extent that there is any vertical order in the fossils at all, such statistical order is only that which a worldwide hydraulic cataclysm, such as has already been inferred from the physical phenomena in the strata, would be expected to produce.

As a general rule, it is obvious that — other things being equal — such a global cataclysm would tend to deposit organisms in ecological burial zones corresponding to the ecological life zones where they were living when caught up by the global flooding. Thus, organisms living at lower elevations (deep-sea marine invertebrates) would usually be buried at

⁴⁸ William Pierce, *Clastic Dykes of Heart Mountain Fault Breccia*, USGS Prof. Paper 1133 (1979), 25 p.

⁴⁹ Guth, Hodges, and Willemin, *Geological Society of America Bulletin*, p. 611.

lower elevations, while organisms living at higher elevations (bears, birds, etc.) would tend to be deposited at higher elevations.

Another factor necessary to consider is that of mobility. Animals that are capable of running, swimming, climbing, or flying can escape burial longer than others. One would, for example, expect to find few fossils of birds or human beings for this reason. Even though finally overtaken and drowned in the rising floodwaters, they would be much less likely to be trapped in the sediments and preserved as fossils than other less mobile animals.

In general, therefore, it is clear that such a worldwide flood would often tend to produce fossil sequences roughly corresponding to those in the standard geological column. There would be many exceptions, of course, and there *are* many exceptions to the standard order, as already discussed.

It should be noted again in this connection that each local geologic column normally incorporates only a few of the geological “periods.” If both marine and terrestrial formations are found in the same column, the marine formations usually (as expected) would be on the bottom, and the land sediments on top. Only rarely is a formation containing fossils of land animals found interspersed between two marine formations from different periods. The main exception to this rule is in the cyclic deposits (e.g., coal seams) along the interface between the lands and the rising waters, as sediments are brought in and deposited first from one direction and then from the other. Normally, all these, however, would be from the same geological “period.”

Even assuming that each geological deposit was laid down rapidly, as discussed previously, many have argued that it would take great lengths of time to convert these sediments into the solid rocks of the geological column. The great thickness of non-lithified sediments in offshore delta deposits, or in deep-sea sediments, are offered as cases in point.

However, the rate of lithification (that is, conversion of loose sediment into stone) depends on many variables, chief of which is the presence or absence of a cementing agent, such as calcite, silica, or others. In the context of a worldwide flood, such materials would be abundant everywhere. Also there would, of course, be plenty of water, as well as conditions of changing pressure and temperature, all of which are conducive to rapid lithification under the right conditions.

As a very relevant example, one need only think of the conversion of a “sediment” of sand, gravel, and water (plus cement!) into solid rock (concrete) in a matter of a few hours. This kind of phenomenon would

have been common during and after any such hydraulic/tectonic/volcanic complex of catastrophes.

The Anomalous Climates of the Ancient World

The present climatic regime of the world is one of varied temperatures zones — arctic, temperate, subtropical, and tropical zones — and these have varied little during recorded history. If this historical regime is considered “normal,” however, then the geologic column contains two important special fossil anomalies. The first is the global temperate-to-subtropical zone throughout most of the geologic column, providing still further testimony to the contemporaneity of all the “ages.” The second is a worldwide glacio-pluvial period (the so-called “Ice Age”) following the global warm period.

Following the cataclysmic death and burial of that ancient world, however, the post-cataclysm sediments of the column indicate a global regime of rain and cold continuing up to the early periods of recorded history.

The great coal measures of the world dating from the late Paleozoic era onward, of course, speak of semi-tropical vegetation essentially everywhere in the world, as does the worldwide prominence of dinosaurs and other reptiles during the Mesozoic era. Furthermore, the atmosphere was richer and heavier, contributing to lush vegetation and abundant animal life everywhere.

The earth’s atmosphere 80 million years ago contained 50 percent more oxygen than it does now, according to an analysis of microscopic air bubbles trapped in fossilized tree resin. . . . One implication is that the atmospheric pressure of the earth would have been much greater during the Cretaceous era, when the bubbles formed in the resin.⁵⁰

The cause of such increased atmospheric pressure (hyperbaric pressure) is conjectural, but it would have had a number of advantages for plants, animals, and people living in it. In fact, hyperbaric pressure chambers are increasingly being used today for medical and therapeutic purposes.

One interesting insight is its provision of an explanation for the once-dominant flying reptiles and their later demise when the atmospheric pressure was reduced to present levels.

⁵⁰ Ian Anderson, “Dinosaurs Breathed Air Rich in Oxygen,” *New Scientist*, vol. 116 (November 5, 1987), p. 25.

A dense atmosphere could also explain how the ungainly pterosaur, with its stubby body and wing span of up to 11 meters, could well have stayed airborne.⁵¹

The higher atmospheric pressure could have been caused by an extensive blanket of water vapor in the upper atmosphere, although there is only a very small amount of water vapor (averaging about an inch of liquid water equivalent) there today. It is difficult to imagine any other cause for the higher pressure. Such a canopy would have served also as a thermal blanket, maintaining a greenhouse-like environment on the earth in the age before it condensed and fell to earth. This correlates, of course, with the evidence of a global warm climate in that age, even in the higher latitudes. Scott Wing and David Greenwood, two paleobotanists with the Smithsonian Museum of Natural History, have compiled much evidence that the winters of the Tertiary era were mild even in such presently frigid states as Wyoming and Montana.

The fossil fauna records compiled by Wing and Greenwood include abundant signs of mild Eocene winters in continental interiors; cold-sensitive land turtles too large to burrow for protection during the winter, diverse communities of tree-living mammals dependent on year-round supplies of fruit and insects, and crocodile relatives, all found as far into the continental interior as Wyoming. . . . The fossil plant data, Wing and Greenwood's specialty, also call for equable continental climate 50 million years ago. Palms, cycads (resembling a cross between ferns and palms), and tree ferns extended into Wyoming and Montana in the Eocene.⁵²

The mild, warm climates extended even deep into the Antarctic Continent during the late Tertiary.

The discovery of thousands of well-preserved leaves in Antarctica has sparked a debate among geologists over whether the polar region, rather than being blanketed by a massive sheet of ice for millions of years enjoyed a near-temperate climate as recently as three million years ago.⁵³

51 Ibid.

52 Richard A. Kerr, "Fossils Tell of Mild Winters in An Ancient Hothouse," *Science*, vol. 261 (August 6, 1993), p. 682.

53 Chris Raymond, "Discovery of Leaves in Antarctica Sparks Debate over Whether Region Had Near-Temperate Climate," *Chronicle of Higher Education* (March 20, 1991), p. A9.

These leaves were found on a cliff in the Trans-Antarctic Mountains, only 250 miles from the South Pole.

The leaves, compressed by subsequent layers of ice, look like fossils. But unlike fossils, which leave only mineral traces of the original organism, the leaves retain their original cellular structure and organic content.⁵⁴

Just as a possible thermal vapor canopy (assumed to be present in the upper atmosphere since the primeval creation) could account for the warm climates and hyperbaric pressures that evidently characterized earth's ancient age, so its condensation and precipitation might account for the global hydraulic cataclysm implicit in the geologic column and also the subsequent regime of cold and rain. At least it seems to provide a model worthy of serious study by geologists and climatologists.

We have indicated that the late Paleozoic era (the *early* Paleozoic is recognized almost entirely by marine fossils), the Mesozoic era, and the Tertiary period of the Cenozoic era were characterized by a global warm climate. On the other hand, the immediate post-Tertiary period — the Pleistocene epoch — is widely known as the Ice Age. It is characterized by many geological phenomena (glacial tills, moraines, striated rocks, etc.) that strongly suggest continental ice sheets in the polar and sub-Arctic latitudes, as well as phenomena indicating a pluvial, or rainy, period in the lower latitudes.

There have been well over 30 theories published purporting to explain the cause of the Ice Age, all of them controversial, and none of them universally accepted. The sudden change in climate resulting from the precipitation of a previous thermal vapor blanket would seem to be the most promising explanation of all. That would also provide much of the water required for the global inundation implicit in the unified sediments of the earth's crust, as discussed in the preceding chapter.

As to the trigger that initiated the condensation and precipitation of the canopy, several suggestions could be offered, but all are necessarily speculative. Some event (e.g., volcanic eruptions, cometary dust swarms, meteor showers) that would provide condensation nuclei for the vapor particles could be one possible cause.

Another obvious evidence of a worldwide flood is the worldwide drying up of inland lakes and seas, along with the evidence that all river

⁵⁴ Chris Raymond, "Discovery of Leaves in Antarctica Sparks Debate over Whether Region Had Near-Temperate Climate," *Chronicle of Higher Education* (March 20, 1991), p. A9.

valleys once carried much larger quantities of water and alluvium than they do now. The Pleistocene Epoch, also known as the Ice Age, is the most recent of the supposed geological ages. The Ice Age in higher latitudes was accompanied by a Pluvial Age in lower latitudes, a rainy period in which the great deserts of the world were all well watered, many having towns and extensive agricultural works; and there were great lakes and deep-flowing rivers everywhere, including regions now arid and barren.

Sir Fred Hoyle and Elizabeth Butler have written a fascinating description of this period, which they attributed to a similar worldwide catastrophe, a sudden impact of cometary dust over the world as a comet swept by:

Acquisition by the upper atmosphere of some 10^{14} gm. of cometary dust would have major implications on the earth's climate. Pluvial activity would increase dramatically as temperature differences between sea and land widened. Global distribution of precipitation would be controlled by the density of the dust in the atmosphere; for a partially reflective blanket, a fraction of solar energy would still reach ground level creating new climatic zones. The totally undecomposed state of the interiors of Siberian Mammoths and the curious distribution, often uphill, of erratic boulders point to unbelievably sudden and severe conditions at the onset and possibly end of a glacial period. We suggest that a reflective blanket of particles could promote such conditions.⁵⁵

With only slight change, this paragraph by two eminent astrophysicists could describe what would happen when the postulated primeval vapor canopy suddenly condensed and precipitated. In fact, one possible cause of its precipitation could well be the earth's passage through a cloud of cometary or meteoritic dust. Hoyle and Butler go on to describe other probable aftereffects:

Streams and rivers would flow for a while in enormous abundance, and inland lakes would fill to exceptionally high levels, as in fact they did. The concurrence of pluvial conditions with ice ages is another challenge to "small cause" theories, since a slow cooling together of oceans and lands over a time scale of approximately 10^4 years would decrease

55 Fred Hoyle and Elizabeth Butler, "On the Effect of a Sudden Change in the Albedo of the Earth," *Astrophysics and Space Science*, vol. 60 (1979), p. 505.

evaporation and precipitation, which the known pluvial conditions clearly show to be wrong. . . . The mammoths became extinct during the last ice age. . . . But if the ice came slowly, over a time-span of approximately 10^4 years, a slow migration to the south would not only be possible, but we think inevitable.⁵⁶

Hoyle and Butler are surely correct in repudiating the various slow-and-gradual theories that have been proposed for the onset of the Ice Age. A worldwide cataclysm, however, provides the only fully satisfactory explanation. The worldwide warm climate indicated in the rocks and fossils of almost all the world's other "geological ages" finds an eminently satisfactory explanation in the greenhouse effect caused by an ancient water-vapor canopy over the earth, the sudden precipitation of which brought on a worldwide flood and, probably, the immediately subsequent Ice Age and Pluvial Age.

In this chapter we have seen abundant evidence that the so-called "geological ages" — the 4.6 billion years of the supposed evolutionary history of the earth and its inhabitants — really constituted only *one* primeval age, characterized by a year-round pleasantly warm climate everywhere, lush vegetation, and a great variety of animal life. That age came to a dramatic and traumatic end in a global hydraulic/tectonic/volcanic cataclysm that produced the earth's great fossil-bearing sedimentary crust. The cataclysm was followed by a relatively brief glacio-pluvial period that eventually settled down into the present more or less quiescent regime with sharp latitudinal and annual climatic variations.

All of this evidence brings into serious doubt the supposed multi-billion-year history of the earth, as commonly taught today. The earth could well be quite young, more or less coextensive with the duration of human occupation and civilization.

The actual physical evidences related to the age of the earth — a few suggesting an old age, but many implying a young age — will be surveyed in the following chapter.

56 Fred Hoyle and Elizabeth Butler, "On the Effect of a Sudden Change in the Albedo of the Earth," *Astrophysics and Space Science*, vol. 60 (1979), p. 508.

Chapter 12

Really, How Old Is the Earth?

In the last analysis, the only evidence for evolution is the assumed multi-billion-year age of the earth. No one has ever observed macro-evolution taking place in the present, there are no transitional forms in the fossils to show it taking place in the past, and the basic laws of observed change in nature clearly indicate that it could never happen at all.

Yet the scientific and intellectual establishments are so reluctant to believe in a Creator who could create all things by His own omnipotence, that they still insist that we *must* believe in evolution. To do that, of course, they must first insist that we believe in a very old earth, arguing that since there has been enough time for evolution, therefore, evolution must be true. The evidence for the earth's great antiquity is so strong, they assert, that believing in a young earth is as unreasonable today as believing in a flat earth.

This intellectual peer pressure has intimidated even many creationists, who, therefore, have opted for some compromise that mixes creation with evolution in one way or another. As shown in Volumes 1 and 3 of this Trilogy, however, such attempts at compromise involve overwhelming theological and sociological problems which, in effect, impugn the character of God.

That area of study, however, is not the purpose of *this* volume. Here we wish, rather, to critique the supposed scientific evidence itself — that is, the scientific data that have been used to determine the so-called “absolute” age of the earth. It turns out, as we shall see, that the weight of the *scientific* evidence alone gives strong evidence that the earth is *far too young* for evolution to be even a feasible model of earth history.

The Beginning of History

Modern intellectuals speak of “millions” or “billions” of years just as though they knew what they were talking about! The fact is, of course, that no human being could *possibly* relate experientially to such numbers.

The rise and fall of kingdoms that thrived two or three thousand years ago is considered *ancient* history. The very *beginning* of *real* history — that is, of events which have been recorded and preserved in actually written accounts, goes back only a few thousand years at the most. Anything earlier than that must necessarily be a matter of some degree of speculation, since there *are no records*.

That this is as far back as we can go *historically* was confirmed many years ago (as if we needed confirmation!) by no less an authority than Colin Renfrew, the premier living archaeological and linguistic scholar in England. He argues that 3100 B.C. is approximately the date of the founding of Egypt’s first dynasty. Then he adds the following:

The Mesopotamian chronology is less reliable than the Egyptian, and it does not go back so far.

This date of 3100 B.C. thus sets the limit of recorded history. No earlier dates can be obtained by calendrical means, and indeed the dates cannot be regarded as reliable before 2000 B.C. . . . Any dates before 3000 B.C. could be little more than guesswork, however persuasive the arguments and the evidence after that period.¹

There are even some Egyptologists who argue that Egypt’s first dynasty did not start until around 2000 B.C., pointing out that Manetho, the Egyptian historian on whom many depend for their chronological calculations, may not have distinguished whether certain dynasties in the two kingdoms of upper and lower Egypt were contemporaneous or sequential.

Renfrew did overlook one chronology more ancient than that of Egypt: one that would extend history back an additional two thousand or so years. That, of course, is the Mosaic chronology as preserved in the ancient Book of Genesis, which — if accepted — would make the early chapters of Genesis the most ancient historical record in the world. Liberal scholars reject Genesis, however, and since the purpose of this

¹ Colin Renfrew, *Before Civilization* (New York, NY: Alfred A. Knopf, 1973), p. 28. Renfrew is Professor of Archaeology at Cambridge University.

volume does not include defending the Bible, we shall simply assume that real history begins no more than 5,000 or so years ago.

Therefore, any dates that are older than that — especially the dates assigned to the supposed geological ages and to the evolutionary history of life — must necessarily be speculative. Any calculated age exceeding 5,000 years before the present must be based on some natural process whose rate of operation in some defined system can be measured as it exists at present, plus one or more assumptions as to how it may have functioned in the past. The components of the system must be known as they exist in the present, and then one or more assumptions made as to their state in the past.

Therefore, to make an age calculation on a very simple system of only one changing component, the following quantities must be either known or assumed:

1. Quantity of the component existing at present in the system.
2. Average rate of change of the component in the past.
3. Quantity of the component at the beginning.

It must also be assumed that the system has been closed throughout its history, with no ingress or egress of the component being measured.

That sounds simple enough in principle. In practice, however, it often becomes very complicated, especially when one realizes that there is no way of *knowing* that the assumptions are valid. For example, there is no way to know how the rate of change of the process may have varied in the past. It is usually *assumed*, therefore, that it has not changed.

Secondly, there is no way of *knowing* that the system has been closed throughout its history. It is very likely that it has *not* been closed. If not, then further guessing is necessary as to how any possible external influences may have affected the changes in the system.

Even more importantly, there is certainly no way of *knowing* what the state of the system may have been at its beginning. No one was there to observe and measure it. One can assume that there was nothing there at all, and that the whole system has grown from scratch, as it were. But that is strictly an assumption, and a very unreasonable assumption at that.

It is especially unlikely in the context of special creation, and that is the very issue we are discussing. How does one know, for example, that the system and its components were not created “full-grown,” so to speak? If an omnipotent Creator exists at all (and, again, that is the very point

at issue), why would He have to “create” something by a slow, wasteful, cruel process requiring millions of years? It would be far more reasonable for Him to create every system in His universe *fully mature and functioning* in its intended purpose right from the start.

Presumably — allowing the existence of God as at least a possibility — His ultimate purpose in creation would involve man, the highest and most complex of His creatures. So why would He waste millions of years in developing trilobites and dinosaurs and other creatures that would die out *before* man ever appeared?

Thus, the calculation of an “age” for anything without taking into full account the possibility of its initial creation as a fully functioning, already completely developed, entity is tantamount to denying God’s existence right from the start. One cannot *prove* evolution simply by denying the possibility of creation!

The usual rejoinder of evolutionists to the concept of the creation of maturity (or “apparent age”) is that it would make God out to be a deceiver, making something “look” old when it was really young.

No it wouldn’t! If anything at all has been truly *created*, it must have been created with *an appearance of at least some prior history*. There could be no creation otherwise. It would only “look” old to one who rejects the very possibility of special creation.

It is, therefore, impossible to make a certain determination of the age of the earth, or of anything else before the beginning of written records. The assumptions that have to be made in order to calculate an “apparent age” are simply the assumptions of uniformitarianism: that is, (1) closed system, (2) constant process rate, and 3) zero starting point. Since none of these assumptions can be known to be valid — especially the third — one can never be sure that a calculated apparent age even approximates the true age of the system.

The only terrestrial processes which, even with these uniformitarian assumptions, will give ages ranging into the desired billion-year realm for the age of the earth are those based on radioactive decay (e.g., uranium/lead, potassium/argon, rubidium/strontium). These will be discussed later in this chapter. On the other hand, there are many worldwide processes which, *even with the traditional uniformitarian assumptions*, will yield earth ages far too young to allow evolution as a viable model of origins.

In this book, we are not trying to determine the true age of the earth. As we have seen, that is impossible scientifically, because of the built-in fallacies in the assumptions that one has to make to calculate an apparent age. We can show scientifically, however, that there is strong *evidence* (not

“proof”) that the earth is too young for evolution to have taken place, even if evolution were possible at all!

That being true, it is quite legitimate to conclude that the earth need not be much older than the beginning of human recorded history. If creation is a better scientific model of origins than evolution (as we have been showing in many ways all through this book), it seems much more *realistic* to start with a completed, functioning creation, fresh from the powerful creative voice of God. There is no need for millions of years, and there is no *sure* scientific evidence of millions of years.

This fact can be illustrated if we take several specific examples of *worldwide processes* that — even with the standard uniformitarian examples — yield apparent ages far too small for evolution to be feasible. There are scores of such processes, with only a very few that can be forced to yield billion-year ages. These few, however, are all that most people hear about, for it is only these that appear large enough to allow for the possibility of evolution.

The Human Population

The worldwide growth process that is of most direct concern to society today is the growth of human population. This began to be of great concern only about 30 or 40 years ago, when people suddenly began to realize that over-population could become a serious world problem if its growth continued at present rates (about 2 percent per year) indefinitely. As a matter of fact, Thomas Malthus had raised this problem early in the 19th century, and his writings had been of great influence in leading Charles Darwin and Alfred Russel Wallace to their “discovery” of the struggle for existence, survival of the fittest, and natural selection as the supposed scientific basis for evolution.

Darwin and Wallace, as well as Malthus, all assumed an exponential growth of population, as do most writers on the subject. It is easy to show mathematically that, starting with just one man and one woman, it would take only about 1,100 years of exponential growth to produce the present world population of around six billion people, if the population were increasing by 2 percent each year. This cannot have been going on for very long in the past, or the world would long ago have been overrun with people.

In the 1970s the rate of increase has slightly exceeded 2 percent per year. That means a doubling time of less than 35 years; the number currently being doubled is a very large one. Projection of such growth for very long into the future produces a world population larger than the most optimistic

estimates of the planet's carrying capacity. In the long run near-zero growth will have to be restored — either by lower birth rates or by higher death rates.²

This kind of alarmist writing has led to rationalizing such Draconian measures as abortion, homosexuality, infanticide, and euthanasia as measures of population control. For our purposes here, of course, population-growth statistics seem to place severe constraints on the age of man's existence on earth.

Not much is known about ancient population sizes, but the exponential-growth model assumed by Malthus, Darwin, and others still seems as reasonable as any, at least during recorded history. However, the present 2 percent growth rate must have been smaller in the past, or the planet would long since have been completely filled with people.

Any numerical description of the human population cannot avoid conjecture, simply because there has never been a census of all the people in the world. . . . The earliest date for which the global population can be calculated with an uncertainty of only, say, 20 percent, is the middle of the 18th century. The next-earliest time for which useful data are available is the beginning of the Christian era, when Rome collected information bearing on the number of people in various parts of the empire.³

Dr. Ansley Coale, who was director of the Office of Population Research at Princeton University, estimated from such data that the world population at the time of Christ was about 300 million.

From A.D. 1 to 1750 the population increased by about 500 million to some 800 million (the median of a range estimated by John D. Durand of the University of Pennsylvania).⁴

Such estimates are, of course, little better than guesses. Who *knows* what the populations of China or India or other distant nations may have been during those years? It becomes even more speculative when researchers

2 Ronald Freedman and Bernard Berelson, "The Human Population," *Scientific American*, vol. 231 (September 1974), p. 31. Freedman, professor of sociology at Michigan University, was President of the Population Council.

3 Ansley J. Coale, "The History of the Human Population," *Scientific American*, vol. 231 (September 1974), p. 41.

4 *Ibid.*, p. 43.

attempt to guess at the size of still-earlier world populations. To do this, they simply assume the standard chronology of supposed human evolution from the Paleolithic era, and make it fit.

For still earlier periods the population must be estimated indirectly from calculations of the number of people who could subsist under the social and technological institutions presumed to prevail at the time.⁵

This presumption leads, however, to absurdly small growth rates, for which no valid evidence exists.

Thus whatever the size of the initial human population, the rate of growth during man's first 990,000 years (about 99 percent of his history) was exceedingly small. Even if one assumed that in the beginning the population was two — Adam and Eve — the annual rate of increase during this first long interval was only about 15 additional persons per million of population. . . . Even if we again assume that humanity began with a hypothetical Adam and Eve, the population has doubled only 31 times, or an average of about once every 30,000 years.⁶

This corresponds to an annual percentage growth rate of only 0.000015 percent. Is it really plausible to believe that for *almost a million years*, populations increased annually by only 15 people per million, and now they have suddenly exploded to 20,000 *each year* per million? Or that the doubling time has suddenly decreased from 30,000 years to 35 years? This is evolutionary philosophy at its most preposterous, and is contrary to all known history and human nature.

As we have seen, the period of real history, as recorded by those who were there, occupies only about 5,000 to 6,000 years or so. Assuming only 4,000 years, to be conservative, and an initial population of only two people, to be even *more* conservative, an annual rate of growth of only 0.5 percent (one-fourth the present rate) would produce the present world population.

This is eminently reasonable, allowing adequately for periods of slow growth because of wars and pestilences and famines (actually, the world's greatest wars, famines, and pestilences have occurred in this present century). But to try to place the start of the human population much

⁵ Ibid., p. 41.

⁶ Ibid., p. 43.

earlier than this is not reasonable. To place it at a million years ago, as Coale assumed, would seem to be beyond all justification, at least as far as population statistics are concerned.

While this line of reasoning does not prove that the earth is young or that the first humans lived only a few thousand years ago, it is far more consistent with the facts of human history and known demographics than is the evolutionary scenario.

Radiocarbon and the Young Earth

It is interesting to recognize that radiocarbon (that is, Carbon 14, the unstable isotope of natural Carbon 12), which has been the basis of the main argument for human antiquity, actually yields a strong argument in support of a *young earth*. Radiocarbon (or C-14) is formed in the atmosphere by the action of cosmic rays on the atoms of Nitrogen 14 in the air. However, the radioactive instability of this C-14 causes it immediately to begin to decay to N-14, the stable isotopic form of carbon. The “half-life” of C-14 (that is, the time it takes for half of the C-14 in a given system to decay back to N-14) is approximately 5,730 years. Therefore, by about six such half-lives, or about 35,000 years, there would be practically no C-14 left to measure (some claim to be able to measure extremely small amounts out to as much as 80,000 years, or 14 half-lives, but that is very doubtful).

Thus, if the cosmic rays were somehow shut off, so that no more C-14 could be generated, it would take about, say, 50,000 years before all the radiocarbon in the earth’s atmosphere, biosphere, and hydrosphere would have decayed back to nitrogen. Similarly, if the cosmic radiation were then turned on again, at the same rate as before, it would take about 50,000 years to build the C-14 back up to a level at which it would be in a “steady-state,” with as much being produced worldwide as the amount decaying.

The problem is that all measurements show that the worldwide “assay” of radiocarbon is not yet at this level, indicating that its production has only been going on for much less than 50,000 years! It is not yet in a steady state, but is still building up in the world. Yet radiocarbon datings on human artifacts are invariably based on the assumption that, regardless of what the data show, the radiocarbon assay of the world *must* be in a steady state. The atmosphere and the earth are far older than 50,000 years, so the reasoning goes, and so that fact requires that radiocarbon *must* be in a steady state.

But the data clearly show otherwise!

We have now learned that one of the basic implicit assumptions of the method — namely, the constancy of the atmospheric inventory of $C^{14}O_2$ — is not strictly correct.⁷

The authors refer to $C^{14}O_2$ (that is, carbon dioxide) because carbon combines with oxygen to form carbon dioxide, a compound that is very important in all plant and animal life processes. Normally, this compound is present as $C^{12}O_2$ — that is, natural carbon dioxide. However C-14 and C-12 are identical, as far as ordinary chemistry goes, so the proportion of radioactive carbon dioxide to natural carbon dioxide in any living organism is presumably the same as that in any other organism at that time, assuming that the C-14 has been distributed uniformly around the world.

When the plant or animal dies, however, it ceases to take in CO_2 , while its C-14 content continues to decay to N-14. Consequently, the ratio of C-14 to C-12 in the organism at any time after death becomes an index to how long it has been dead, or the last date at which it was still living. This is the concept behind the radiocarbon dating method. It has been reasonably confirmed by historical dates back to about 3,000 years ago, though with many obviously incorrect results. For older dates, however, the invalidity of the steady-state assumption is bound to result in radiocarbon dates that are *too high*, with the error increasing as the age increases! The steady-state assumption actually has been known to be wrong ever since the method was first suggested back in the 1940s by Willard Libby.⁸

We now know that the assumption that the biospheric inventory of C^{14} has remained constant over the past 50,000 years or so is not true.⁹

For those who wish to have a quantitative indication of just how wrong this assumption is, the following authoritative assessment is given:

We note in passing that the total natural C-14 inventory of 2.16×10^{30} atoms . . . corresponds to a C-14 decay rate of 1.63×10^4 disintegrations/ m^2 s of the earth, considerably below the estimated production rate of C-14 atoms averaged over the

7 Elizabeth K. Ralph and Henry N. Michael, "Twenty-five Years of Radiocarbon Dating," *American Scientist*, vol. 62 (September/October 1974), p. 553. Dr. Ralph is professor of archaeology and radiocarbon at the University of Pennsylvania.

8 W.F. Libby, *Radiocarbon Dating* (Chicago, IL: University of Chicago Press, 1955), p. 7.

9 Ralph and Michael, "Twenty-five Years of Radiocarbon Dating," p. 555.

last 10 solar cycles (111 years) of $2.5 \times 10^4 \pm 0.5 \times 10^4$ atoms/m²s. From a geophysical point of view, it would be very surprising if the decay rate and the production rate were out of balance as seriously as the two numbers would suggest. It is difficult to reconcile this discrepancy by errors in computing the C-14 inventory since the bulk of the C-14 is in the sea, where the C-14 concentration relative to the terrestrial biosphere is known fairly well.¹⁰

Thus, there are 25,000 C-14 atoms per square meter per second being generated, and only 16,300 disintegrations. That is, about 50 percent more is being produced than is decaying, and this can mean only that the earth's atmosphere (where the production takes place) is far younger than 50,000 years!

The source of the discrepancy is therefore unknown unless the present-day production rate is indeed significantly higher than the average production rate over the last 8,000 years, the mean life of C-14.¹¹

The authors of this assessment, of course, cannot allow themselves to consider that the earth's atmosphere (and, therefore, the earth itself) must be significantly younger than 50,000 years old. So, instead, they propose the seemingly outlandish conclusion that the cosmic-ray incidence on the earth must be much higher now than it used to be. This could be true only if the atmosphere had been shielded by some sort of protective canopy (say of water vapor!), or a much stronger magnetic field in the past. But either of these assumptions will also yield a much younger earth! It does seem clear — at least to those not blinded by evolutionary presuppositions — that the continuing worldwide build-up of radiocarbon is strong evidence for an earth *far too young* for evolutionism to be feasible.

The Decaying Magnetic Field

As a matter of fact, there is definitely strong evidence that the intensity of the earth's magnetic field was much stronger in the past than it is today! This fact was first emphasized by a creationist physicist, Dr. Thomas G. Barnes, then professor of physics at the University of Texas

10 A.W. Fairhall and J.A. Young, "Radiocarbon in the Environment," in *Advances in Chemistry*, vol. 93 (1970), p. 401–418.

11 Ibid.

(El Paso) and director of its Shellenger Research Laboratory.¹² However, it is now a widely recognized — though not yet explained — fact:

Measurements of the main field . . . show that the over-all intensity of the field is declining at a rate of 26 nanoteslas per year. . . . If the rate of decline were to continue steadily . . . the field strength would reach zero in 1,200 years. . . . Moreover, little is known about what may cause the field — which is created by currents churning in the earth's molten core — to decline in strength.¹³

Dr. Barnes had previously pointed out that the main magnetic field of the earth, also called the dipolar field of the earth, with magnetic north and south poles slowly varying in location around the earth's axial poles, had been decaying in the intensity of its magnetic moment for over 135 years of recorded worldwide measurements. As with other known decay processes (e.g., radioactive decay), the magnetic decay data fit best on an exponential curve, with a half-life of 1,400 years. That is, the intensity of the earth's dipolar field would have been twice as strong 1,400 years ago as it is today.

If extrapolated back to 7,000 years (that is, $5 \times 1,400$), which is the approximate age of the earth that is suggested by known human history, human population statistics and atmospheric radiocarbon build-up, the strength of the field would have been $(2)^5$, or 32, times as strong as it is today! It could hardly ever have been much greater than that, as the earth's structure itself would have disintegrated with a much stronger field.

At any given location on the earth, the local magnetic field may represent a combination of the over-all dipole field with local effects that may change its local direction and intensity. Barnes limited his analysis, however, to the dipole field, as determined by integration of measurements all over the world. Later criticisms of his results on the basis of local-field effects are, therefore, irrelevant. There is no doubt that the dipole field of the earth as a whole is decaying.

The dipole component of the earth's field was considerably stronger 2,000 years ago than it is today. . . . In the next

12 See the second edition of Barnes' monograph *Origin and Destiny of the Earth's Magnetic Field* (San Diego, CA: Institute for Creation Research, 1983), for a detailed exposition of this evidence.

13 "Magsat Down, Magnetic Field Declining," *Science News*, vol. 117 (June 28, 1980), p. 407.

two millennia, if the present rate of decay is sustained, the dipole component of the field should reach zero.¹⁴

When and if the earth's magnetic field strength reaches zero, its shielding effect on the earth will also be removed, with possibly harmful effects on human and animal health and longevity, as the incidence of cosmic radiation on the earth's surface is increased.

Of more interest to our immediate discussion is the implication that the earth's magnetic field was much stronger in the recent past, which is impressive evidence that the earth itself is very young — an age measured in thousands of years, rather than millions or billions of years. Evolutionists generally have tried to dismiss this evidence with a reference to the many past reversals of magnetic polarity in the earth, asserting that the present decline is merely a phase in the repeating cycle of reversals.

This answer is far from satisfactory, however. As discussed in chapter 10, the main evidence for global magnetic-field reversals (the so-called magnetic "stripes" on the sea floor on the two sides of the Mid-Atlantic Ridge) has been seriously questioned, if not positively refuted, by the grid of vertical stripes as well as horizontal stripes now known to characterize the sea floor magnetization pattern.

Furthermore, these reversals have supposedly been "dated" to occur at intervals of 500,000 to 700,000 years. But if the present decay cycle — which is scheduled to reach zero in the next 1,000 to 2,000 years — has been going on for 500,000 years, the earth long since *would have been vaporized* under the intense heat generated by the decaying electric currents, or dynamo motions, or whatever is producing the magnetic field in the earth's deep interior.

It is true that there is much evidence of former magnetic reversals now preserved in various basaltic rocks and other igneous formations at a number of places around the earth, including some that suggest much shorter periods of reversal (e.g., reversed polarity within a single lava-flow rock), but there is as yet no compelling evidence that any of these represent *global* reversals of the magnetic field, rather than ephemeral local phenomena.

In all the thousands of years that people have lived in the aura of the earth's magnetic field, no one has ever discovered why it exists. . . . It took until the middle of this century for geophysicists to arrive at the idea that the swirling dance of the

¹⁴ Jeremy Bloxham and David Gubbins, "The Evolution of the Earth's Magnetic Field," *Scientific American*, vol. 261 (December 1989), p. 71.

earth's liquid iron core somehow generates the magnetic field. But the detailed choreography of this motion, what energy source drives it and how it gives rise to the field, remain stubbornly out of reach.

There are all sorts of sources outside the earth — ionospheric currents and magnetic storms, for example — that induce currents to flow in the mantle, setting up magnetic fields that merge with that generated by the core.¹⁵

Evolutionists generally explain the earth's dipolar magnetic field by a great "dynamo" in the earth's core, with great masses of molten iron "swirling" around, and perhaps reversing directions at intervals. No one knows whether such a dynamo really exists, of course, or what gives it the tremendous energy to keep swirling around, if it does exist, and especially to change directions. How this would generate a magnetic field at the surface or how it could cause the polarity to reverse (either instantly or gradually) is also highly speculative.

For that matter, it is not even known whether the earth's core consists of iron *or* of some completely different state of intensely pressurized matter. It is also believed by evolutionists that this presumed dynamo in some unexplained way provides the massive energies required to move whole continents around on the earth's surface.

This remarkable (and relatively new, since about 1965) paradigm of deep dynamos, magnetic reversals, plate tectonics, spreading sea floors, drifting continents, emerging and subducting mantle materials, is sufficiently flexible to explain a wide variety of geophysical and geological phenomena (just as is the evolutionary paradigm); but that is not to say that any part of it has ever been observed occurring, any more than evolution has ever been observed. There are, in fact, still many reputable geophysicists and geologists (not just creationists) who question the whole concept.¹⁶

Creation has never been observed occurring either, of course, but the creation paradigm is also flexible enough to explain these and all other phenomena (if they are real phenomena), and to do so much more simply and directly. For example, the present exponential decay of the magnetic dipolar field is easily explained by circulating electrical currents in the

15 Steffi Weisburd, "The Earth's Magnetic Hiccup," *Science News*, vol. 128 (October 5, 1985), p. 218.

16 See, for example, the symposium *New Concepts in Global Tectonics*, eds. S. Chatterjee and N. Holton (Lubbock, TX: Texas Tech University Press, 1992). This compilation contains 23 papers by geophysicists and other scientists who reject the plate-tectonics paradigm, and propose various other theories to explain the same phenomena.

earth's deep interior. These were *created* by the earth's Creator at the time that the earth was created, and they have been decaying ever since, generating heat as they flow against resistance, resulting both in heat flow to the surface and an exponentially decaying magnetic field.

In fact, the theory as developed by Dr. Barnes is quite an elegant theory, explaining many other phenomena associated with the magnetic field, and adequately accounting for the local phenomena associated with reversals and similar matters. One should refer to his monograph previously cited (see footnote 12) for more details.

One more difficulty should be mentioned in relation to the idea of dipole reversals. There is a titanic amount of energy associated with the generation of the earth's magnetic field, no matter how it is generated, and that energy will have been dissipated when the field decays to zero strength. How then could it ever start up again? The basic energy conservation law would seem to preclude it, unless there is some great (but unknown) source of energy to start up the "motor" again. And even if there were such a giant "crank" somewhere in the earth, why would it start it up in the *opposite direction*?

During the past 10 million years the earth's magnetic field has reversed polarity once every 500,000 years or so. Yet the dipole field decays on a much shorter time scale. These facts suggest that the dipole field does not reverse polarity after every period of dipole decay.¹⁷

So the subject continues to grow in complexity — and confusion.

It is interesting . . . that there is no accepted explanation of the origin and physical significance of earth's magnetic polarity changes.¹⁸

It is simpler, of course, and more in accord with actual scientific observations, to conclude that the present dipolar decay of the magnetic field is real and permanent, and that it essentially tells the whole story. This means that the earth must be only a few thousand years old!

Decaying Comets

Another decay process of significance to the age of the earth is the gradual disintegration of the comets of the solar system. It is well-known

17 Bloxham and Gubbins, "Evolution of the Earth's Magnetic Field," p. 75.

18 J. C. Pratsch, "Petroleum Geologist's View of Oceanic Crust Age," *Oil and Gas Journal*, vol. 84 (July 14, 1986), p. 114.

that the comets, like planets, orbit the sun, and so presumably are of an age comparable to that of the solar system as a whole, including the earth. The problem is that they are all disintegrating. Many have already died out, and the ones that are still active (both short-period comets and long-period comets) are also known to be breaking up.

This is true of even the most famous comet of all, Halley's Comet, as well as all other known comets.

Indeed the rate at which comets such as Halley lose material near perihelion is so great that they cannot have been in their present orbits for very long, either. . . . Their [planetary physicists] conclusion is that the time Halley's comet has spent in the Inner solar system is a mere 23,000 years, perhaps enough for fewer than 300 revolutions of the orbit.¹⁹

Now even if the above rather extravagant extrapolation were correct, evolutionists cannot settle for anything like 23,000 years as the age of the solar system. It would be far too brief a time for any evolution to occur.

Accordingly, they have invented an imaginary "Oort Cloud" of "wannabe" comets somewhere on the distant edges of the solar system. Every now and then, the gravitational pull of some nearby star, or of something else, supposedly pulls one of these comets-in-waiting out of the cloud, and sends it spinning into orbit around the sun. When that comet eventually disintegrates and falls into the sun, another will be fortuitously released from the cloud, thus keeping the cometary component of the solar system more or less constant.

This convenient Oort Cloud, however, has never been observed through any telescope. The only evidence for its existence is the evolutionary *need* for it, to keep from admitting that the solar system is young. Its name comes from the name of the otherwise relatively unknown astronomer who invented it.

In this accepted view of the appearance of comets, the existence of the Oort Cloud itself is not a firm reality, but is inferred, essentially from calculations of the chance that such an object will be catapulted into the inner solar system and from the number of known comets. In the circumstances many

19 John Maddox, "Halley's Comet is Quite Young," *Nature*, vol. 339 (May 11, 1989), p. 95.

people would be happier if there were more objective evidence for the reality of the Oort Cloud.²⁰

Evolutionists would be happier, no doubt, but creationists are quite satisfied with the evidence as it stands. Most known comets are already gone and the ones that remain are breaking up. *The obvious conclusion is that they are young.* Therefore, the solar system to which they belong is young, and the earth is even younger!

Down to the Sea

The same Edmund Halley after whom the famous comet was named back in the 17th century, is believed to be the first to suggest that the age of the ocean (and, therefore, the age of the earth) could be determined by dividing the salt in the sea by the annual influx of salt from rivers carrying it down to the sea. From such calculations, a popular figure for the age of the earth during the 19th century was about 50 million years.

Even allowing for known egress of salt from the ocean because of sea spray, deposition in salt marshes, or whatnot, the known data could not bring the age up to more than about 100 million years, and this was not enough to satisfy the Darwinians, who needed more time to make evolution appear feasible. Accordingly, they abandoned all such methods as soon as radiometric dating came in and enabled them to upgrade the earth's age, first to about 2 billion years, and then eventually to 4.6 billion years.

Nevertheless, the influx of chemicals (not only salt, but a host of other substances) into the ocean from rivers still provides many valuable age-indicators for the ocean. One can calculate the age from at least 30 different chemicals, and all of them — with no exception — will yield an age far too small for evolution.

The chemical composition of sea water is quite well known, and so is that of rivers emptying into the ocean. It is a matter of simple arithmetic — dividing the amount of a given chemical *in* the ocean by the average annual inflow of that chemical *into* the ocean — to get the number of years required for the process.

The results are extremely variable, all the way from 100 years for aluminum to 45 million years for magnesium. However, this variability is only to be expected, because all such calculations are based on the unrealistic assumptions of uniformitarianism. The rates of influx of most chemicals were probably greater in the past, because the rivers carried more water, and the continents were higher and more easily eroded. This

20 John Maddox, "Halley's Comet is Quite Young," *Nature*, vol. 339 (May 11, 1989), p. 95.

would reduce all age estimates, of course. Some ages are abnormally small, however, because of man-derived additions of chemicals to the rivers (e.g., wastes from riverside aluminum plants during the past century).

The most unrealistic assumption, however, is that the oceans had only fresh water when first created. Since multitudes of organisms seem specifically designed for life in salt-water environments, this is an unrealistic assumption that makes most age estimates from such calculations far too high.

Evolutionists dismiss such evidence, however, with the naive and hasty argument that this type of computation merely yields the “residence time” of the given chemical in the ocean rather than the time required to build up the ocean’s component of that chemical from a zero base.

Actually, the same calculation would yield *both* the build-up time and *also* the residence time once the “build-up” had reached a “steady-state” with the “out-go.” For the idea of residence time to have any meaningful basis, however, it first needs to be shown that there is actually an efflux of the given chemical from the ocean (through atmospheric recycling, sea floor deposition, or other “sinks”) sufficient to achieve the postulated steady state.

This, however, the evolutionists have not been able to show. In the few cases where enough real measurements have been made to enable such calculations to be made, the results have always contradicted the steady-state assumption. Consider, for example, the quantities of *metallic* elements in the ocean:

The startling conclusion . . . is that most trace metals are at extremely low concentrations in the oceans and have rather unspectacular variations in their concentrations. The calculated theoretical concentrations of copper, nickel, silver, gold, lead and other metals in the oceans are many orders of magnitude higher than the best currently measured values.²¹

The reason that these concentrations are all so low is undoubtedly because the rivers and oceans are only thousands of years old, instead of millions or billions, so they have not yet reached their natural steady state. Turekian guesses:

21 Karl K. Turekian, “The Fate of Metals in the Oceans,” *Geochimica et Cosmochimica Acta*, vol. 41 (1977), p. 1139.

The secret lies in the role particles play as the sequestering agents for reactive elements during every step of the transport process from continent to ocean floor.²²

Exactly what these particles are and how they manage to “sequester” so much copper, nickel, silver, gold, and lead along the way is a matter of speculation — not of observation.

At least one rather detailed study of one important element — uranium — was made a number of years ago, in an attempt to quantify all such sequestering agents and sinks along the way.

The ocean contains over 4 billion tons of dissolved uranium, at a concentration of 3.3 parts per billion. . . . A detailed mass-balance calculation has shown that only about 10% (0.2×10^{10} grams per year) of the present-day river input of dissolved uranium can be removed by known sinks.

The mean uranium concentration in world rivers is about 0.6 parts per billion. This value multiplied by the total river flux of water of 0.32×10^{20} grams per year gives 1.92×10^{10} grams per year as the total riverine influx of dissolved uranium.²³

In addition to the 10 percent of this uranium influx that is removed by sinks in the ocean itself (presumably, deposition on the ocean floor), there are a number of removal agents en route to the ocean.

Low and high-temperature alteration of basalts, organic-rich sediments and co-existing phosphorites on continental margins, metalliferous sediments, carbonate sediments, and sediments in anoxic basins deeper than 200 meters remove about three-fourths of the present-day riverine supply to the ocean.²⁴

Thus, about 85 percent of the 19.2 billion grams coming to the ocean each year is removed, leaving 15 percent (or 2.88 billion grams) to be added to the ocean itself. The 4 billion tons *already* in the ocean is equal to 3,640 trillion grams.

22 Karl K. Turekian, “The Fate of Metals in the Oceans,” *Geochimica et Cosmochimica Acta*, vol. 41 (1977), p. 1139.

23 Salman Block, “Some Factors Controlling the Concentration of Uranium in the World Ocean,” *Geochimica et Cosmochimica Acta*, vol. 44 (1980), p. 373.

24 *Ibid.*, p. 376.

Therefore, the maximum age of the ocean in terms of uranium content is 1,250,000 years. This seems like a long time, but it would take us back only into the Pleistocene Age (the time of the glacial period) according to standard geologic chronology. Furthermore, it assumes that there was no uranium in the ocean to begin with, and it also allows an extremely generous extraction of uranium by various possible sinks and sequestering agents. Without the latter, the maximum age would be calculated as $(1,250,000)(0.15)$, or only 187,000 years.

A similar, very detailed calculation of the maximum age of the ocean, based on its sodium content (the main component of the ocean's salt), has been made by Dr. Steve Austin and Dr. Russell Humphreys. Both are creationists with impeccable credentials, Austin a geologist, Humphreys a geophysicist.

After calculating in full detail all possible sources of both sodium input and output, they concluded that the maximum possible age for the ocean (even assuming *no* sodium in the ocean to begin with) was 32 million years.²⁵ Therefore, the evolutionist's dodge of an imagined "residence time" for the chemicals in the ocean, assuming a steady-state situation for all these chemicals, fails to check out whenever detailed measurements are made of all sources of output and input and are carefully considered. This evidence cannot prove what the actual age of the ocean may be, since there is no way of knowing its initial composition, but it *does prove* rather conclusively that the earth is far too young for organic evolution.

It can even be shown, based on present rates of continental erosion and sea floor deposition (again based on uniformitarian assumptions and on present rates) that neither the present continents nor the ocean bottom sediments can be older than about 15 million years.

Furthermore, based on the present average influx of juvenile water from the earth's deep interior, all the water in the ocean could have been produced by volcanism in 340 million years, which would take us back, geologically speaking, to only the Silurian "period," the age of fishes. In fact, the entire crust of the earth could have been produced by volcanism at present rates in 500 million years, *less than one-ninth the present assumed age of the earth*.

There are many other indicators of a young earth (or, at least an earth too young to allow evolution as a viable theory of origins) that are discussed in more detail in many other books by creationist scientists. For

25 Steven A. Austin and Russell D. Humphreys, "The Sea's Missing Salt: A Dilemma for Evolutionists," *Proceedings of the Second International Conference on Creationism*, vol. 2 (1991), p. 17–33.

the most part, the documentation in this book has been restricted to citations from articles and books written by evolutionary scientists, in order to forestall the charge of biased quoting from only those of like mind to that of the writers.

There are, however, numerous scientific discussions of evidences for recent creation available in books and articles by creationists. A few relevant book titles by the writers and their colleagues at the Institute for Creation Research are listed below for those who want further information on the *scientific evidences for recent creation*. There are many others, of course, but it is impracticable to list them all here, as well as injudicious to list only selected titles from other creationists. Hence, only ICR-related books are listed below.

Scientific Creationism, ed. Henry M. Morris (Master Books, 1985), p. 91–170.

What is Creation Science? by Gary E. Parker and Henry M. Morris (Master Books, 1987), p. 3, 223–296.

The Young Earth, by John D. Morris (Master Books, 1994), p. 45–117.

The Biblical Basis for Modern Science, by Henry M. Morris (Baker Book House, 1984), p. 260–269, 304–335, 414–426.

Science, Scripture and the Young Earth, by Henry M. Morris and John D. Morris (Institute for Creation Research, 1989), p. 25–82.

The Genesis Flood, by John C. Whitcomb and Henry M. Morris (Presbyterian and Reformed Pub. Co., 1961), p. 331–437.

Age of the Earth's Atmosphere, by Larry Vardiman (Institute for Creation Research, 1990), 32 p.

Radiocarbon and the Genesis Flood, by Gerald E. Aardsma (Institute for Creation Research, 1991), 82 p.

Origin and Destiny of the Earth's Magnetic Field, by Thomas G. Barnes (Institute for Creation Research, 1983), 132 p.

Studies in Flood Geology, by John Woodmorappe (Institute for Creation Research, 1993), 208 p.

Grand Canyon: Monument to Catastrophe, by Steven A. Austin (Institute for Creation Research, 1994), 288 p.

Ice Cores and the Age of the Earth, by Larry Vardiman (Institute for Creation Research, 1993), 87 p.

In two of the above books (*What is Creation Science?* and *The Biblical Basis for Modern Science*), one of the writers (H. Morris) has listed some 68 worldwide natural processes which, with the standard uniformitarian assumptions, will yield a young age for the earth, *far too young for evolution*.

However, the average person never learns about these works, for that very reason: they would not justify the evolutionary paradigm. Conversely, the handful of radiometric dating methods that *do* allow billions of years for certain rocks are very widely publicized. It is *these* dating techniques, based on radioactive transmutation of certain elements into others, which operate so very slowly that they can be made to yield billion-year-type ages, that are widely believed to provide the time needed by evolutionists for their model. These are considered briefly in the following section.

The Uncertain Sound of Radiometric Dating

A number of dating methods are based on the radioactive decay of one element into one or more other elements, and these decay process rates have been measured very precisely. The ratio of “parent” elements to “daughter” elements in a given system is therefore considered, when properly calibrated, to measure the “age” of that system.

The main radiometric decay processes used in dating are as follows:

Uranium 238 decays through a long chain of elements into non-decaying Lead 206 and Helium 4, with a half-life of 4.5 billion years.

Uranium 235 decays into Lead 207 and Helium 4 with a half-life of 0.7 billion years.

Thorium 232 decays into Lead 208 and Helium 4 with a half-life of 14.1 billion years.

Potassium 40 decays into Argon 40 and Calcium 40 with a half-life of 1.3 billion years.

Rubidium 87 decays into Strontium 87 with a half-life of 49 billion years.

Other similar processes are used occasionally, as well as various sub-processes based on the five noted above. The latter are the most significant, however, and most widely used.

The types of fallacies that can be noted in these are typical of those that could apply to all of them. All are based fundamentally on *uniformitarianism, which is itself invalid*, rendering all such pre-historic age guesses essentially meaningless.

First of all, there is no certainty that the radioactive decay rates have always been the same, although this is not the most questionable assumption. More to the point is the “closed-system” assumption. In the real world of real physical processes, there is no such thing as a true closed system. Either the parent element or daughter element or both can more or less easily move in or out of a radioactive mineral, thereby completely upsetting any desired age-reading. In fact, most such radioactive age measurements turn out to be “discordant” or “anomalous” for this very reason, and are rejected.

However, in the context of the creation-evolution issue, neither of these questionable assumptions is the real problem. With such long half-lives, if the mineral contains any of the daughter element *at all*, it suggests a very old age. Even if the system yields an anomalous age (that is, an age that disagrees with the assumed geologic age), or a suite of discordant ages (that is, different ages calculated from different decay processes operating in the same rock formation), whatever “ages” are suggested will all tend to be very great — and that is why evolutionists favor radiometric dating over all other processes.

The real problem, however, is the arbitrary rejection of the *very possibility* of initial special creation, when that is the very question under debate. If there is a Creator (as the abundant evidence of complex design in the universe would indicate, as well as the utter absence of any real evidence of macro-evolution), it is eminently reasonable that He would create a complete and fully functioning universe right from the start. It follows then, that the mere presence of a so-called “daughter element” in a mineral would not at all have to mean that it had been derived over long ages by decay from its supposed “parent element.” It could just as well — in fact much more likely — have been *created* there to begin with. At the very least, it would be impossible to prove otherwise.

Thus, the “apparent age” of a given radioactive mineral would have no relation whatever to its true age. At the very moment when the granite rock, for example, was created, the uranium-bearing minerals contained in it could have indicated an apparent age of, say, a billion years. The

Creator, as Creator, surely has the right to set the “clock” to read whatever “time” He chooses.

The fact that different minerals and different rocks in different parts of the world now all read different times can be accounted for by mixing and distributing processes occurring during later geophysical catastrophes of either a regional or a global nature, even if they were all set to read the same “zero time” to begin with.

To the evolutionist, such suggestions are abhorrently unscientific, because it would make it impossible ever to determine the true age of the earth by scientific observation and calculation.

Exactly! That is the point! If an evolutionist has determined to deny *even the possibility of creation*, he is espousing atheism, whether he intends to do so or not. As noted before, if any entity of any sort whatever is supernaturally *created*, it necessarily will appear to have been there *before* it was created. Therefore, it necessarily will have an “appearance of age,” so to speak. And if creation is a possibility, then the most logical thing for the Creator to do would be to create the entire cosmos — including the earth and all its living creatures — *complete and functioning right from the start*.

He surely would have some high purpose in creation — after all, an omnipotent Creator would not be uncertain or capricious in His actions — so He would definitely not waste eons of time in trial-and-error evolutionary meandering, involving incredible waste and cruelty, before beginning, to accomplish that purpose! Vast ages of evolution may make some sense to an atheist or to a pantheist, but surely not to anyone who believes in an omniscient, omnipotent Creator — a Creator who would surely know a better way to do it, and then be fully able to carry it out.

* * *

In this volume, we have reviewed many scientific evidences and arguments against evolution and in favor of special creation. Creation is at least a very viable alternative to evolution as a model of origins. If creation is even possibly true, then uniformitarianism would necessarily be invalid if projected back into the creation period, and it would be completely impossible to determine just *when* creation took place.

That does not mean that we will never be able to know the date of creation, but it *does* mean that we can learn it only if the Creator chooses to tell us when it was. That would require a special revelation from God himself, however, and a discussion of revelation is beyond the scope of this volume. *That* topic, of course, is fully treated in Volume 1 of this Trilogy.

Even apart from revelation, however, and even using the uniformitarian approach, we have seen much evidence that the earth is quite young, with *no good evidences* that the long geological ages ever took place at all! Radiometric dating can be applied only to individual minerals, and it is subject to many errors, whereas population growth, radiocarbon build-up, magnetic-field decay, growth of ocean chemicals, and other processes that we have discussed are all global processes much less influenced by any local changes. Furthermore, the great geological deposits all speak of a single global cataclysm, not long ages of evolution.

Therefore, the weight of all truly scientific evidence is not only opposed to evolution *per se*, but also to the concept of the vast ages that might allow evolution to appear possible. Genuine *science* — as distinct from naturalism and scientism — thus adds its testimony of the recent special creation of all things to that of the divine revelation of the One who created all things, as recorded in the Bible, and as shown compellingly in Volume 1.

This should not be surprising, for the God who made the world is the One who wrote the Word! Naturally, the two will agree.

Index of Subjects

- abiogenesis 20, 162
- adaptation, biological 31–32, 34, 47
- age of the earth
 - assumptions in estimating 315–317
 - changing estimates 286
 - comets, decay of 326–328
 - magnetic field, decay of 322–326
 - ocean, influx of chemicals
 - into 328–331
 - radiometric dating, fallacies
 - in 333–335
 - social pressures to accept
 - great age 313–314
 - various evidences of
 - young age 331–333
 - See also:* chronology, historical;
 - heologic dating
- anatomy, comparative 239–241
- anomalous fossil formations 300–308
- Archaeopteryx* 67–70
- atmosphere, supposed reducing 191–193
- Australopithecus* 84–88
- big-bang theory
 - background radiation 215–216
 - cause-and-effect, contradicts 126
 - creation event, alleged 226–227
 - evidences, supposed 213–217
 - expanding universe 213–215, 219
 - hydrogen/helium formation 216–217
 - inflationary modification 208–211
 - multiple universes 223–224
 - scientific fallacies 206–207, 211–223
- biogenetic law 30
- biogeography 237–240
- birds, fossil 67–70
- black holes 225, 230
- Cambrian explosion 59–61
- canopy theory 309–310
- carbon-14 dating 320–322
- catastrophism, geological
 - cave deposits 268–269
 - coal and oil deposits 266–268
 - evaporite beds 265–266
 - fossil graveyards 55, 262–265
 - global cataclysm 278–283, 298, 308–312
 - modern revival 22, 258–263
 - overthrusts 302–306
- cause-and-effect, law of 125–126, 168
- chaos, supposed order through 150–158
- chirality 187, 196–198
- chronology, human
 - Egyptian and Sumerian 314
 - population statistics 317–320
 - radiocarbon dating 320–322
- classification, biological
 - evidence for creation 28
 - fossils 50–51, 53, 61
 - Linnaean system 26–27, 37
- climate, ancient 308–312
- coal and oil deposits 266–268
- coelacanth 113
- cold dark matter 222–223
- comets, decay of 326–328
- comparative morphology 239–241
- complexity, *See:* probability
- conservation
 - natural selection as a conservation
 - mechanism 35, 45, 46
 - See also:* energy; first law of thermodynamics
- continental drift 269–273
- cosmic evolution 206–227
 - See also:* big-bang theory
- creation
 - evidence from classification 28
 - evidence from fossil gaps 51–52, 56–71, 106–109
 - evidence from thermodynamics 132, 149–150, 204
 - overview of scientific evidence 13–23
 - See also:* probability
- crystal growth 147–148, 181–182
- cytochrome C 243, 244
- dinosaurs 120–123, 264–265
- directed panspermia 162, 189, 195–196
- dissipative structures 150–158, 178–179
- DNA molecule, *See:* genetics, evolutionary
- dragons 120–123
- ecological zonation 299–300, 306–307
- Ediacaran fauna 59, 282
- Egyptian chronology 314
- embryology 235–237, 296
- energy
 - conversion 130–131
 - conversion mechanisms needed
 - for evolution 144–146
 - decreasing availability 131–132, 135
 - definition and forms of 129–130
 - See also:* thermodynamics
- entropy, *See:* second law of thermodynamics
- evaporites 265–266
- evolution
 - assumed as fact, with no
 - evidence 15–17, 19
 - biogeography, supposed evidence
 - from 237–240
 - cosmic evolution 206–227
 - ex nihilo* evolution 207–208 210–211, 218

- extinctions, evolution by 111–113, 259, 262, 276–278
- fossil record, no transitional
 - forms in 48–72, 106–109
- gaps between kinds in
 - present world 26–29
- imperfections, alleged
 - evidence from 45–48
- languages, no evolutionary
 - explanation for 91–99
- mammalian evolution, gaps in 73–79
- man, confused evolutionary
 - history of 79–91
- morphology, comparative 239–241
- planetary evolution 230–232
- present evolution not
 - occurring at all 25–48
- processes of evolution
 - unknown 30–32
- recapitulation theory 235–237
- stellar evolution 227–230
- vestigial organs 233–235
- ex nihilo* evolution 207–208, 210–211, 218
- exobiology 162, 189, 195–196
- expanding universe 213–215, 219
- extinctions 111–113, 259, 262, 276–278
- finches, Darwin's 238–239
- first law of thermodynamics 130–131
- fishes, fossil 62–64
- flood geology, *See*: catastrophism
- fluid pressures in rocks 304–305
- fossils
 - amphibians and reptiles 64
 - anomalous fossils 300–308
 - apes, fossils of 82
 - Archaeopteryx* 67–70
 - bird fossils 67–70
 - Cambrian explosion 59–61
 - evolution, main evidence
 - for 49–51, 54, 57
 - evolutionary order,
 - theoretical 298–300
 - fishes, fossils of 62–64
 - graveyards 55, 262–265
 - horse series 73–76
 - living fossils 113–123
 - mammal-like reptiles 65–67
 - man, fossils of early 79–91
 - prokaryotes 58–59
 - transitional forms, ubiquitous absence
 - of 51–52, 56–71, 106–109
 - vertebrates, earliest 61–64
 - whales 76–79
- fruit-flies, mutations in 43–45
- gaps between kinds, ubiquitous
 - present-day organisms 25–48
- fossil record 51–52, 56–71, 106–109
- genetics, evolutionary
 - DNA and the genetic code 142–143, 184–185, 195, 200, 251
- junk DNA 251–253
- molecular clocks, alleged 247–251
- molecular homologies,
 - supposed 242–247
- pseudo-genes 240–241, 253–255
- RNA world 197–198
- genome, human 243–244
- geographical distribution 237–248
- geologic column
 - ages, supposed evolutionary 289–300
 - definition and description 54–55, 257–258
 - formations out of order 300–308
- geologic dating
 - anomalies in supposed order ... 298–308
- Cenozoic era, dating of 297–298
- circular reasoning 287–298
- fossils, based on evolutionary
 - order of 288–290, 295–296
- index fossils 290, 292
- See also*: age of the earth
- global cataclysm, evidence for
 - unique 278–283, 298, 308–312
- graptolites, living 114
- hard parts, preservation of 60
- homology, supposed evolutionary
 - significance of 239–241
- hopeful monsters 104–106
- horses, supposed evolution of 73–76
- Homo erectus* 88–90
- human evolution, alleged
 - Australopithecines 84–88
 - Homo erectus* 88–90
 - lack of evidence 79–84
 - languages, origin of 91–99
 - Neanderthals 90–91
- hyperbaric pressure 308–309
- Ice Age 308, 310, 312
- imperfections as evidence for evolution
 - 45–48
- index fossils 290–292
- inflationary universe 208–211
- information theory 134–135, 183
- insects, origin of 41, 117–119
- languages, origin of 91–99
- life, origin of
 - high improbability 161–173, 189–191
- natural selection of proto-molecules
 - 194–195
- primeval atmosphere 191–193
- RNA world, imagined 197–198
- lithification 307–308

- living fossils
 - all extant organisms 114, 119–120
 - bacteria 114–115
 - dinosaurs (dragons) 120–123
 - fish (coelacanth) 113
 - graptolites 114
 - insects 117–119
 - marine invertebrates 116
- magnetic field, decay of 322–326
- mammal-like reptiles 65–67
- mammals, fossil 73–79
- microevolution 30–31
- models, creation and evolution 14, 17–19
- molecular clocks 247–251
- molecular homologies 242–247
- moon, origin of 231
- mosaic forms 70–71
- multiple-universe theory 223–224
- mutations
 - fruit-flies 43–45
 - harmful 38–41
 - random 146
- natural selection 33–36, 146, 174–175, 194
- Neanderthals 90–91
- negentropy 183
- neo-Darwinism, *See*: mutations; natural selection
- oceans, influx of chemicals to 328–331
- ontogeny and phylogeny 235–237, 296
- overthrusts 302–306
- peppered moth 41–42
- pesticides, insect resistance to 41
- planets and satellites,
 - evolution of 231–232
- plate tectonics 272–273
- platypus 70–71
- polyploidy 32
- population statistics 317–320
- probability arguments
 - high improbability of
 - order 170–175, 184–191
 - life, impossibility of chance
 - origin 161–174, 189–191
 - second law, relation to 175–184
 - zero probability 168–169
- protein sequencing, *See*: genetics, evolutionary
- pseudo-genes 240–241, 253–255
- punctuated equilibrium
 - alternative to gradualism,
 - evolutionary 101–104
 - fossil gaps, evidenced by ... 107–109, 111
 - hopeful monsters 104–105
 - life, origin of 188–189
 - political implications 108–109
 - stasis 102, 109–110
- racism 95, 97–98
- radiocarbon dating 320–322
- radiometric dating, fallacies in 333–335
- recapitulation theory 235–237, 296
- religion and evolution 10
- RNA world 197–198
- salt beds 256–266
- salt influx to ocean 328–331
- science, definition of 13
- sea-floor spreading 271–272
- second law of thermodynamics
 - big-bang theory, contradicts 206
 - creation, proof of 132
 - creation model, predicted
 - from 148–150
 - energy, decreasing availability
 - of 131–132
 - entropy, law of 131, 146–147
 - exceptions, criteria for
 - apparent 141–150
 - information theory 134–135, 183
 - open-system argument,
 - irrelevance of 138–141
 - organization and order,
 - decreasing 132–133
 - probability, relation to 175–184
 - universal applicability 158–160
- soft-bodied animals, fossils of 60–61
- solar system, origin of 230–232
- soup, postulated primeval 191–193
- spontaneous generation 20, 162
- stalagmites and stalactites 268–269
- stasis 32–33, 102, 109–110, 262
- stellar evolution 227–230
- stereochemistry 187, 196–198
- tautology, natural selection as 34, 35
- taxonomy, *See*: classification, biological
- thermodynamics
 - classical 131–132
 - comprehensive scientific
 - principles 129–130
 - entropy and increasing
 - disorder 127–129, 136–138
 - evolution, contradicted
 - by 128–129, 136, 153–156
 - first law 130–131
 - second law 131–136, 175–184
 - statistical 132–133
- transitional forms in fossils, absence
 - of 51–52, 56–71, 106–109
- unconformities, no worldwide 279–283
- uniformitarianism
 - assumed as basic for
 - evolutionism 20–21
 - historical geology, basis of 258–262
 - modern repudiation 274–276
 - See also*: catastrophism

variation, biological 30–31
 vestigial organs 47, 233–235, 254

whales, supposed evolution of 76–79
 worldwide flood, *See*: catastrophism

Index of Names

Aardsma, Gerald E. 332
 Addicott, Warren O. 297
 Ager, Derek 56, 261, 262, 274, 288, 293
 Alfven, Hannes 215, 216, 255
 Allmon, Warren D. 262
 Alters, Brian 111
 Amato, Ivan 249
 American Association for Advancement of
 Science 277
 Anderson, Ian 308, 309
 Andrews, Henry N. 116
 Angrist, Stanley W. 176, 177, 180
 Arensberg, B. 90
 Arp, Halton ... 213, 214, 215, 217, 220, 225
 Asimov, Isaac 92, 130, 133, 135, 138
 Austin, Steven A. 276, 331, 333
 Ayala, Francisco J. 31, 32, 39, 41, 164,
 165, 253
 Azar, Larry 106, 292
 Babloyants, Agnes 147, 148, 153, 179
 Bada, Jeffrey L. 198
 Badham, N. 192
 Barnes, Thomas G. 322, 323, 236, 332
 Barton, N. H. 31
 Baugh, Albert C. 96
 Beesley, E. M. 280
 Behrensmeier, Anna K. 263
 Bengston, Stefan 59
 Benton, Michael 277
 Benton, Mike 245
 Berelson, Bernard 318
 Berg, Christine 87
 Berggren, W. A. 274
 Berry, Adiran 193
 Birch, L. C. 15, 16
 Bishop, Martin 245
 Block, Salman 330
 Bloxham, Jeremy 324, 326
 Bludman, S. A. 210
 Blum, Harold 133
 Blyth, Edward 34
 Borel, Emil 140
 Boucot, A. J. 56
 Brady, Ronald H.
 Brett, Carlton E. 263
 Briggs, Derek E. G. 60, 61, 62
 British Geological Association 274
 Britten, Roy J. 248

Broca, Paul 92
 Brooks, Daniel R. 153, 154, 155, 156,
 157
 Bunney, Sarah 91
 Burbidge, Geoffrey 212, 214, 216, 217
 Burbidge, Margaret 214
 Busse, P. H. 86
 Butler, Elizabeth 311, 312
 Campbell, Cathryn A. 291
 Campbell, Neil 75
 Carr, Bernard 228
 Carroll, Lewis L. 64
 Cavalli-Sforza, L. L. 97
 Cavrel, R. 228
 Charlesworth, Brian 154, 156
 Chatterjee, Sankar 65, 325
 Cherfas, Jeremy 42, 46
 Cherry, David 213
 Chinzei, Kujotaka 297
 Chomsky, Noam 93, 94, 95, 99
 Chown, Marcus 219, 223
 Clemmey, H. 192
 Coale, Ansley J. 318, 319
 Corliss, W. A. 269
 Coyne, J. A. 31
 Creation Research Society 9
 Crick, Francis 189, 195, 196
 Crosswell, Peter 223
 Crowe, Richard A. 126
 Cumming, Ken 6, 15
 Curtis, Garniss 83
 Cutler, Alan H. 300, 301
 Cuvier, Georges 259
 Darwin, Charles 33, 34, 35, 52, 56, 95,
 102, 107, 164, 193, 233, 234, 235,
 237, 238, 254, 259, 260, 317, 318
 Davies, P. C. W. 206
 Davies, Paul 220, 221, 226
 Davis, D. Dwight 52, 53
 Dawkins, Richard 38, 39, 163, 107, 108
 DeBeer, Gavin 240
 de Santillana, Giorgio 82
 Denton, Michael 120, 247
 Dietz, Robert S. 266, 270
 Dilly, Noel 114
 Dobzhansky, Theodosius 27, 39, 294
 Dodson, Peter 68
 Dose, Klaus 198, 199

Dott, Robert	22, 281, 282	Gubbins, David	324, 326
Down, J. L. Haydon	296	Guth, Alan H.	208, 211
Dunbar, C. O.	289	Guth, P. L.	305, 306
Dupont, Georges	269	Haeckel, Ernst	47, 233, 234, 235, 296
Durand, John D.	318	Haldane, J. B. S.	39
Dyson, Freeman J.	134, 176	Hall, J. M.	272
Eddington, Arthur	136	Haller, John S., Jr.	95
Edwards, Dianne	116, 117	Halley, Edmund	328
Ehrlich, Paul	15, 16	Harris, Sydney	136, 137
Eigen, Manfred	185, 186, 187	Haskins, Carl P.	200
Eiseley, Loren	34	Hawking, Stephen	205, 221, 222, 226
Ekdale, A. A.	265		227
Eldredge, Niles	28, 29, 32, 33, 67, 70	Hecht, Max K.	237, 250, 294
	107, 109, 110, 111, 112, 120, 155,	Hedberg, Hollis	288, 289
	262, 294	Heikes, K. E.	86
Ellison, Samuel P., Jr.	287	Hepler, Loren G.	176, 177, 180
Engle, A. E. J.	21, 273, 286	Hewith, Adelaide	214
Environmental Mutagenic Society	40, 41	Hodges, K. V.	305, 306
Erbich, Paul	199, 200, 245	Hofstadter, Douglas R.	185
Erwin, Douglas H.	61, 113, 259	Holton, N.	325
Fairhall, A. W.	322	Hopson, James A.	62, 64, 67, 85
Falk, Dean	85, 89	Horgan, John	193, 194, 195, 196, 197
Feduccia, Alan	68		214
Felsenstein, Joseph	155	Howgate, Michael E.	249
Fox, Sydney	173	Hoyle, Fred	67, 189, 190, 191, 208
Freedman, Ronald	318		216, 217, 225, 311, 312
Frey, Iris	158	Hsu, Kenneth J.	261
Friday, Adrian	245	Hubbert, M. King	304, 305, 306
Futuyma, Douglas J.	18	Hughes, David W.	231
Gallagher, Jay	229, 230	Humphreys, Russell D.	331
Gardiner	244	Huxley, Julian	39, 128
Gensel, Patricia G.	116	Huxley, Leonard	23
Geological Society of America	277, 288	Huxley, Thomas	22, 23, 95, 107
George, T. N.	52, 53	Jefferson, David J.	83
Gibbons, Ann	91	Jeffries, Harold	269, 270
Gillette, D. D.	265	Jepsen, Glen L.	39, 52
Gingerich, Philip D.	77, 78, 79	Jeram, Andrew J.	116, 117
Gish, Duane	6	Johanson, Donald	81, 82, 83, 84
Golay, Marcel	169	Jones, J. S.	83
Goldschmidt, Richard	104, 106	Kauffman, Eric S.	259, 275
Goodman, Morris	248	Kelvin, John	129
Gould, Stephen J.	15, 32, 34, 35, 37, 44	Kemp, Tom	66, 67
	45, 46, 47, 49, 50, 55, 56, 59, 67, 70,	Keppel, Jean	229, 230
	71, 75, 76, 80, 81, 92, 102, 103, 104,	Kerr, Richard A.	230, 272, 309
	105, 106, 107, 108, 109, 110, 111,	Kimura, Motoo	41
	112, 115, 119, 155, 156, 188, 189,	Kirschner, Robert P.	227
	233, 234, 236, 262, 277, 278, 282,	Kitts, David B.	292
	296, 306	Knoll, Andrew H.	58
Grant, Peter R.	238, 239	Koestler, Arthur	36, 37
Grassé, Pierre P.	43, 49, 50, 57, 117	Kojata, Gina Bara	244
	244, 302	Korey, Kenneth A.	247, 248
Greco, Frank	137	Krassilov, V.	300
Greenwood, David	309	Lafont, Louis	169
Grene, Marjorie	237, 238	Laszlo, Ervin	151
Gretener, P. E.	302, 303	Layzer, David	127, 140
Griffin, Donald R.	291	Leakey, Louis	84, 87
Grimaldi, David	118	Leakey, Mary	84, 86

Leakey, Richard	81, 82, 83, 84, 87, 89
Lepkowski, Wil	151
Lerner, Eric J.	218
Levine, R. P.	145
Lewin, Roger	61, 66, 123, 138, 139, 156, 242, 243, 249, 275, 277
Libby, W. F.	321
Linde, Andrei	224
Lindsay, R. B.	127, 131
Linnaeus, Carolus	27
Lockley, M. S.	265
Loewenstein, Jerald	83
Lombard, R. Eric	66
Lyell, Charles	20, 21, 259, 260, 261, 297
Lytelton, R. A.	269, 270
Macbeth, Norman	37
MacIntyre, Ross J.	237, 250
Maddox, John	212, 327, 328
Majer, Mirko	33
Malthus, Thomas	317, 318
Manetho	314
Mann, Alan	82
Martinez, Joseph D.	266
Matthews, L. Harrison	17
Max, Edward E.	240, 241, 253, 254
Maxwell	129
Mayr, Ernst	15, 38, 39, 52
McComas, William F.	111
McIrvine, Edward C.	134
McMeramin, Mark A. S.	283
Meeter, Merle	6
Mendis, Asoka	216
Michael, Henry N.	321
Miller, Julie Ann	235, 236
Miller, Stanley	192, 193, 194, 195, 196, 197, 198
Moles, M.	215
Monastersky	70
Monastersky, R.	119
Moody, Paul	52, 53
Mora, Peter T.	173, 174
Morris, Conway	263
Morris, Henry	84
Morris, Henry M.	10, 84, 152, 286, 152, 332, 333
Morris, John D.	332
Myers, Norman	112
Narlikar, Jayant	215, 216, 217
Nelson, Gareth V.	88, 291
Newton, Isaac	129, 221
Nicolis, Gregoire	147, 148, 153, 179
Novacek, Michael J.	264
Nowak, Rachel	252, 253
O'Rourke, J. E.	290, 292, 294, 295
Oldershaw, Robert	212, 216, 217, 224, 225
Ommanney, F. D.	63
Oparin, Alexander	192
Orgel, Leslie	162, 185, 189, 196, 197, 198
Oxnard, Charles	85, 86
Page, Don H.	208, 209
Paley, William	34, 46
Parker, Barry	225
Parker, Gary E.	332
Pascal, Blaise	305
Pasteur, Louis	196
Patterson, Colin	35, 37, 244, 250
Peebles, P. J. E.	218, 220
Pennisi, Elizabeth	267
Peratt, Anthony L.	214, 219, 222, 223
Pesely, Gregory Alan	36
Peterson, Ivars	212
Philips, Walter A.	122
Pierce, William	306
Pilbeam, David	80, 81, 82, 92
Pippard, A. B.	136
Platnick, Norman	88
Plessa, Karl W.	300, 301
Popper, Karl	16
Power, Corey S.	229
Pratsch, J. C.	271, 272, 326
Prigogine, Ilya	127, 147, 148, 150, 151, 152, 153, 154, 156, 157, 176, 177, 178, 179, 180, 181, 183
Puthoff, Harold	218
Rabinowicz, Ernest	159
Radinsky, Leonard B.	62, 64, 85
Rak, Yoel 84, 85, 90, 91	
Ralph, Elizabeth K.	321
Rapetski, John E.	62, 299
Raup, David M.	63, 74, 75, 115, 174, 175, 275, 276, 296, 298
Raymond, Chris	265, 309, 310
Renfrew, Colin	314
Rensberger, Boyce	90
Richards, Eveleen	108
Ridley, Mark	57, 251, 253, 254
Rifkin, Jeremy	44
Rigby, Sue	114
Robinson, P. T.	272
Ross, John	150
Rowe, Timothy	250
Rubey, William	304, 305, 306
Ruse, Michael	38, 108
Rush, J. H.	128
Sagan, Carl	157
Salet, Georges	169
Salisbury, Frank B.	169
Salvador, Amos	281
Sarich, Vincent	248
Scadding, S. R.	47, 233, 234, 254
Schaeffer, B.	294
Scheffer, Victor B.	76

Scherer, Siegfried	250, 251	Valentine, James W.	61, 113, 291
Schindewolf, O. H.	104, 288	Van Andel, T. H.	276
Schmidt, Karen A.	162	Van Couvering, J. A.	274
Schwabe, Christian	245, 246	Vardiman, Larry	6, 332, 333
Scott, Andrew	184, 195	Vilenkin, Alexander	217
Seilacher, Adolph	282	Vines, Gail	67
Selden, Paul A.	116, 117	von Dechend, Hertha	82
Sepkowski	276	Vrba, Eelizabeth	110
Sereno, Paul	69	Waddington	36
Shakespeare, William	163	Wald, George	20, 128, 135, 136
Shea, James H.	260, 261	Waldrop, M. Mitchell	219, 224
Simon, Cheryl	282	Walker, Alan	89
Simons, Elwyn L.	78, 79	Wallace, Alfred Russel	317
Simpson	36, 39, 52, 53, 92, 93, 96	Wallace, Bruce	237, 250
Smith, B. Holly	78, 79	Warr, Gregory W.	246
Smith, Charles J.	148, 149	Watson, D. M. S.	19, 20
Smith, Mary Ruth	6	Watson, Lyall	80, 82
Smith, Peter J.	109, 111, 112	Weinberg, Steven	229
Smith, Quentin	126	Weisburd, Stefi	272, 273, 325
Society of Economic Paleontologists and Mineralogists	281	Weisskopf, V. F.	175, 176, 180, 181, 182, 183
Sommerfeld, Arnold	140	Welles, Samuel Paul	287
Spetner, Lee	67	West, Ronald R.	293
Sansom, I. J.	62	Wheeler, H. E.	280
Stanley, Stephen M.	54, 74, 102, 104, 108, 112, 113, 248, 297	Whitcomb, John C.	332
Stebbins, G. Ledyard	39, 253	White, Errol	63
Steere, W. C.	294	White, Tim	83
Steinhardt, Paul J.	211	Whittington, H. B.	263
Stengers, Isabelle	151, 152, 153	Wickramasinghe, N. Chandra	67, 190, 217
Stent, Gunther S.	93, 94, 98, 99	Wiedersheim, R.	233, 234
Stevenson, David	230	Wiley, Edward O.	153, 154, 155, 156, 157
Strahl, Stuard D.	69	Willemin, J. H.	305, 306
Stravropoulos, George P.	181, 182	Wilson, Allan C.	244, 248, 249
Stringer, Christopher B.	83	Wilson, Edward O.	38, 108
Tashian, J. H.	248	Windhorst, Roger A.	229
Tashian, R. E.	248	Wing, Scott	309
Taubes, Gary	195	Woodhouse, Mitchell	266
Taylor, Stuart Ross	230, 231	Woodmorappe, John	332
Templeton, Alan R.	250	Wootton, Robin J.	117
Thomas, Lewis	145, 146	Wright, Sewall	39, 105
Thompson, W. R.	29	Wursig, Bernard	77
Thomsen, D. E.	208	Wynn-Williams, Gareth	228
Tobey, James A.	159	Yam, Philip	252
Todd, Gerald T.	63	Yockey, Hubert P.	147, 173, 183, 184, 190, 191
Trefil, James	209, 211	Young, J. A.	322
Tribus, Myron	134	Zihlman, Adrienne	83
Tryon, Edward P.	207, 209, 210, 211, 217	Zimmer, Carl	118
Tudge, Colin	80	Zuckerman, Solly	85
Turekian, Karl K.	329, 330		
Tuttle, Russell	86		

The Modern Creation Trilogy

Volume III

**Society
and
Creation**

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Creation**

Dr. Henry M. Morris

Dr. John D. Morris



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Table of Contents

Introduction	9
1. The Pervasive Influence of Evolution	11
The Biological Sciences	14
The Physical Sciences	15
The Earth Sciences	17
The Social Sciences	18
Ethics and Religion	22
2. The Long History of Evolution	31
The Darwinian Century	31
Why Darwin?	34
Evolutionism before Darwin	42
Evolutionism in the Pre-Christian World	45
The Ultimate Origin of Evolutionism	53
3. The Corrupt Fruits of Evolutionism	57
The Tragic Heritage of the Recapitulation Theory	57
(1) The Standard Geologic Column	59
(2) Freudian Psychoanalysis	60
(3) Modern Racism	61
(4) The Plague of Abortionism	62
The “Free Choice” of Abortion	63
Evolutionary Psychology and the Sexual Revolution	67
Homosexuality and the Drug Culture	73
Tooth and Claw	77
4. Evolutionism and Its Deadly Social Philosophies	81
Social Darwinism	81
Ultimate Evolutionism — Nazism and the Master Race	85
Racism and the Struggle for Life	92
The Bible, Evolution, and Modern Racism	95

The Racism of Darwinism	99
Revolutionary Evolution and Communism	105
Evolution and the New Age	117
5. Evolution Everywhere	129
Creation, Evolution, and Ecology	129
Evolution and the Population Problem	140
Life on Other Worlds	148
Chauvinism, Feminism, and Evolution	156
Evolutionary Dominance in Education	161
Games People Play	176
6. Evolution and Compromising Christians	181
Theological Confusion	182
Evangelical Compromise	186
Current Evangelicalism	192
Index of Subjects	197
Index of Names	199
Index of Scripture	202

Introduction

“Be not deceived: evil communications corrupt good manners” (1 Cor. 15:33). Nowhere is this biblical maxim more relevant than in the influence of evolutionism in human society. The evolutionary deception and its evil influences have, indeed, corrupted every area of human life on this planet, and this fact in itself should be enough to demonstrate its ultimate satanic source. Evolutionism is a false religion, designed to turn men and women away from belief in the true God of creation and from participation in His wonderful gift of salvation and eternal life.

Volume 3 of this Trilogy is designed to show the age-long, pervasively evil, influence of evolutionism. In Volume 1 (*Scripture and Creation*), it is shown that the Holy Scriptures, the inspired Word of God, clearly teach that all things were created, not evolved. Volume 2 (*Science and Creation*) demonstrates that all the *real facts* of science (as distinct from naturalistic speculations) likewise point to special creation, rather than evolution.

It is not surprising, therefore, that rejection of creation and the Creator in favor of evolutionary speculations will have a deadly impact upon society and all human relationships. The Lord Jesus reminds us that “a good tree bringeth not forth corrupt fruit; neither doth a corrupt tree bring forth good fruit” (Luke 6:43). The corrupt fruits of evolution prove beyond question that evolution is a corrupt tree with corrupt roots. Christians and others often try to pluck off and destroy the fruits of evolutionism (abortion, Communism, etc.), but they will merely grow back again, as long as the tree and its roots are left in the ground.

First, however, Christian believers and other concerned persons must be able to see that this is really the case. They need to be taught the true nature of evolutionism, with its long history and destructive influence on human life and society.

That is the main purpose of this volume, the third in what we have called “The Modern Creation Trilogy.” First, we want to document the

fact that evolutionism does, indeed, dominate our educational system and our whole society, being taught in practically every subject in the schools, as well as in all the news media and in our very political and legal structure.

We then must see also that it is not just a peripheral development in an increasingly secularized society. Evolutionism, in either atheistic or pantheistic form, has penetrated and dominated almost every religious, cultural, and political system throughout history. This insight will help us to understand the cosmic dimensions of the conflict of evolutionism with true creationism, and how we should respond to its application in the many problems of modern society.

Finally, we want to examine in some detail many of these problems and the impact of evolutionary thinking in aggravating them. This in turn will enable us to appreciate — and, it is hoped, implement — the salutary effect of applying creationist criteria to their solution.

That is the purpose of this particular volume. We shall begin, then, by showing how evolutionary philosophy does, indeed, pervade every discipline of modern education and communication.

Chapter 1

The Pervasive Influence of Evolutionism

For several decades after the Scopes trial, most people, including even most Bible-believing Christians, tended to regard the evolution-creation issue as one of very little importance. The question of uniformitarianism versus catastrophism, including whether the flood of Noah was worldwide or only local, was considered of even less importance.

These events of the far-off past, many felt, have no relevance to the pressing problems of the modern world, and therefore were matters of little concern to them. The questions could well be left to the professional geologists, in the case of uniformitarianism, and to the biologists, in the case of evolutionism. Even in the matter of Christian faith, the gospel of Christ did not then seem to depend upon any particular cosmological model; both evolutionists and creationists could believe in God and could be saved through personal faith in Jesus Christ, so the argument went. A person's relation to God and to his fellowmen did not depend upon whether he or she believed that the Flood was worldwide. If necessary, they felt, it would somehow be possible to reinterpret Genesis to correspond to the prescriptions of the evolutionary scientists without any particular damage to basic biblical philosophy and teaching.

It is this continuing attitude of indifference that is, if anything, more harmful to true faith, however, than even open hostility by the camp of atheism. It *does* make a tremendous difference what men believe about their origin, and the sad history of the Christian church of the past 150 years ought to be sufficient proof of this fact. The evolutionary-uniformitarian cosmology is far more than a mere biological or geological hypothesis. It is a complete world view, a comprehensive philosophy of

life and meaning. One cannot really believe in an evolutionary *history* of the world without also believing in an evolutionary *future* of the world. A person's philosophy of origins will inevitably determine sooner or later what he believes concerning his destiny, and even what he believes about the meaning and purpose of his life and actions right now in the present world!

The doctrine of origins, indeed, is the foundation of every other doctrine. That, of course, is why God placed His revelation of origins in the first chapter of the Bible. Everything else in the Bible and in history is built upon this foundation. Once the foundations have been undermined, it is only a matter of time before the entire superstructure must collapse. Harvard biologist Dr. Ernst Mayr, one of the world's leading evolutionists, confirms this as follows:

Since Darwin, every knowing person agrees that man is descended from the apes. . . . Evolution has an impact on every aspect of man's thinking: his philosophy, his metaphysics, his ethics. . . . Today, of course, there is no such thing as the theory of evolution; it is the fact of evolution. . . . The only arguments now are over technical problems, but the basic fact of evolution is so clearly established that no scientist worries about it any more.¹

Professor Mayr is an outstanding scientist, probably one of the top half dozen or so evolutionary biologists in the world, but either his ignorance or arrogance is clearly showing in the above interview.

Thousands of well-qualified scientists in the world today are convinced creationists. One of these, Dr. Kenneth Cumming, who studied under Dr. Mayr at Harvard and received his Ph.D. degree in Dr. Mayr's department, is now dean of the Graduate School at the Institute for Creation Research (ICR). Another creationist scientist, Dr. Duane Gish, with a Ph.D. in biochemistry from the University of California (Berkeley) — a school with an equivalent reputation on the West Coast to that of Harvard on the East — clearly defeated Dr. Mayr in a written debate in *Nature* magazine several years before joining the ICR science staff. He has since participated in over 300 debates with leading evolutionary scientists, but neither Dr. Mayr nor any other Harvard evolutionist will condescend (dare) to debate him in public.

Dr. Mayr is right, however, in stating that evolution has infected every area of human thought, and is commonly taught in the schools and

¹ Ernst Mayr, "Interview" *Omni* (March/April 1988), p. 46.

colleges of the whole world as an established fact. As a leading socialist scholar (himself an evolutionist, though not a Darwinian evolutionist) he has said:

Evolutionary theory has been enshrined as the centerpiece of our educational system, and elaborate walls have been erected around it to protect it from unnecessary abuse.²

With respect to God's role in the universe, the evolution model essentially eliminates it altogether (as practically all of the leaders of evolutionary thought believe), or at least relegates it to some external and innocuous supervision that can never be demonstrated or even studied in any scientific way. In an earlier article Mayr said this:

Every anti-evolutionist prior to 1859 allowed for the intermittent, if not constant, interference by the Creator. The natural causes postulated by the evolutionists completely separated God from his creation, for all practical purposes. The new explanatory model replaced planned teleology by the haphazard process of natural selection. This required a new concept of God and a new basis for religion.³

At present, evolutionary thought is dominant not only in biology, but also in all other disciplines as well. The creationist cosmology has been held by only a small minority, and too few of these have had any substantial scientific comprehension of its implications.

One of the leading evolutionists of this century emphasized the universal scope of the evolutionary process as follows:

Evolution comprises all the stages of the development of the universe: the cosmic, biological, and human or cultural developments. Attempts to restrict the concept of evolution to biology are gratuitous. Life is a product of the evolution of inorganic nature, and man is a product of the evolution of life.⁴

2 Jeremy Rifkin, *Algeny* (New York, NY: Viking Press, 1983), p. 112.

3 Ernst Mayr, "The Nature of the Darwinian Revolution" *Science*, vol. 176 (June 2, 1972), p. 988.

4 Theodosius Dobzhansky, "Changing Man," *Science*, vol. 155 (January 27, 1967), p. 409.

Another prominent proponent of evolutionary thought, Dr. William Provine of Cornell University, emphasizes the completely atheistic assumptions of the modern scientific establishment.

Modern science directly implies that the world is organized strictly in accordance with deterministic principles or chance. There are no purposive principles whatsoever in nature. There are no gods and no designing forces that are detectable.⁵

Some even consider this approach to be a kind of a game they must play in order to be *accepted* as scientists.

Operational science takes no position about the existence or non-existence of the supernatural; only that this factor is not to be invoked in scientific explanations.⁶

No creationist scientist, of course, would ever invoke miracles to explain natural phenomena that can be observed in operation today, although evolutionists often imply that this is what we do. But “operational science” is altogether different from what some have called “origins’ science.” There is no way that the origin of the universe or of life or of the various major kinds of life can ever be observed or tested in the field or in the laboratory today. That being so, there is no reason whatever *not* to invoke the supernatural to explain origins — especially when (as shown compellingly in Volume 2 of this trilogy) presently *observable* processes do not **originate** anything. But that’s the game evolutionists play!

The Biological Sciences

That biology is dominated by evolutionism today goes almost without saying. Such scientists as those cited above (e.g., Mayr, Dobzhansky, Dickerson) are biologists. Note also the statement below by Dr. Provine, stressing that not only are biologists evolutionists, but also, in almost all cases, atheists.

5 William B. Provine, “Progress in Evolution and Meaning in Life,” in *Evolutionary Progress*, ed. Matthew H. Nitecki, (Chicago, IL: University of Chicago Press, 1988), p. 65.

6 Richard E. Dickerson, “The Game of Science,” *Perspectives on Science and Faith*, vol. 44 (June 1992), p. 137. Dr. Dickerson was a member of the team of scientists on the accreditation team that tried unsuccessfully in 1989 to close down the ICR Graduate School because we would not play this game. He stated that even if we met all other criteria, our programs should not be approved as long as we persisted in teaching science in a creationist context, even though the ICR Graduate School was a private school receiving no money from federal, state, or local governments.

Very few truly religious biologists remain. Most are atheists, and many have been driven there by their understanding of the evolutionary process and other sciences.⁷

Probably the area of biology of greatest interest to most people is that of anthropology, the study of man and his life processes, especially his origin.

The accepted theory of man's development leaves no room for the biblical Adam, but rather visualizes a gradual divergence of man and the apes from an unknown common ancestor perhaps in the Pliocene Epoch or earlier, with man finally evolving into essentially his present form perhaps about a million years ago. Human evolution is insisted upon as factual, not even open to question.

That man has evolved from less distinguished ancestors is indisputable. What we are concerned with is not to show where man came from. That we no longer doubt. But to show how he came; to show the processes by which ape-like animals became men.⁸

It is hardly necessary to point out the profound influence of evolution on the study of life processes. It is here, in biology, that organic evolution is best known. All standard biology textbooks today are structured entirely around the evolutionary model, and this is true at every grade level. Life is always presented as having evolved by natural processes from non-life, all the various higher forms of life from simpler forms, and finally man himself as the highest product of the evolutionary process to date. Whether the particular study is botany, zoology, genetics, ecology, embryology, or any of the other many branches of biological science, the underlying philosophy is always that of evolution!

The Physical Sciences

The physical sciences are as much affected today by evolutionary thinking as are the life sciences. Even physics is influenced a great deal by cosmogonic speculations.

Modern astrophysics has brought a new aspect to physics: the historical perspective. Previously, physics was the science of things as they are: now, astrophysics deals with the development

7 Provine, "Progress in Evolution," p. 68.

8 C.D. Darlington, *The Evolution of Man and Society* (New York, NY: Simon & Schuster, 1970), p. 32, 21.

of stars and galaxies, with the formation of the elements, with the expanding universe. . . stars are formed from a hydrogen cloud, elements are formed by synthesis from hydrogen, and stars are developing through different states.⁹

Even in such fields as mathematics and technology, the authors of textbooks commonly feel it necessary to begin their treatments with their own purely imaginary speculations about how their particular field of technology first evolved. For example, a popular mathematics book begins thus:

In the beginning, there were no numbers; or, if there were, primitive man was unaware of them. Whether the numbers were always “there” (where?) or had to be invented, has been a much discussed question, and we shall leave it to the philosophers to continue that discussion without our aid. What we can say with some assurance is that the ability to count came relatively late to civilization.¹⁰

Almost all astronomers, astrophysicists, and cosmologists today seem at least to be practical atheists, diligently seeking to explain even the origin of the universe itself without God. It evolved out of nothing but the mathematics of quantum physics and relativity theory, not requiring any kind of cause at all, so they say!

Thus we reach a general conclusion: there is no philosophy of big bang cosmology that makes it reasonable to reject the fundamental thesis of big bang cosmology: that the universe began to exist without a cause.¹¹

Herein is a most marvelous thing! The fundamental premise of science is that every effect must have an adequate cause. Yet the greatest “effect” of all — the mighty universe itself — had no Cause to produce it. It just happened!

Not only did the universe evolve out of nothing. From that remarkable beginning, the basic elements, the stars, the galaxies, the planets, and even living organisms — as well as everything else — have

9 Victor K. Weisskopf, “Physics in the Twentieth Century,” *Science*, vol. 168 (May 22, 1970), p. 929–930.

10 C. S. Ogilvey and John L. Anderson, *Excursions in Number Theory* (New York, NY: Oxford University Press, 1966), p. 1.

11 Quentin Smith, “Did the Big Bang have a Cause?” *British Journal of Philosophy of Science*, vol. 45 (1994), p. 666.

evolved from that primeval “happening,” according to our evolutionist astronomers, physicists, and chemists, as pointed out by Professor Weisskopf above.

Lest anyone think that the above scenario is merely a creationist plot to make evolutionists seem ridiculous, consider one more quotation from an evolutionary humanistic scientist.

So what had to happen to start the universe was the formation of an empty bubble of highly curved space-time. How did this bubble form? What caused it? Not everything requires a cause. It could have just happened spontaneously as one of the many linear combinations of universes that has the quantum numbers of the void. . . . Our universe is a very unlikely one, but it is the only one we have. And this unlikeliness of our universe is no argument for it having been planned.¹²

Well, then, what is the evidence that it was *not* planned? Again, let Dr. Stenger answer:

Much is still in the speculative stage, and I must admit that there are yet no known empirical or observational tests that can be used to test the idea of an accidental origin.¹³

It would, indeed, be difficult to devise a test that could observe something impossible happening in the non-observable, non-repeatable past! Dr. Stenger is modest enough to “admit” that.

In any case, it is certain that evolutionism dominates the physical sciences today just as much as the biological sciences.

The Earth Sciences

As far as geology and the other earth sciences are concerned (e.g., paleontology), the situation is similar to that in the physical sciences. Those aspects of geology that deal with *present* phenomena and processes (just as in physics and chemistry) are carried out without regard to the *origin* of the processes or systems. When, however, geologists venture into *historical* geology (that is, the origin and development of the earth during the assumed geological ages), their science is also fully dominated by evolutionism. This aspect is especially dominant in paleontology, of course.

12 Victor L. Stenger, “Was the Universe Created?” *Free Inquiry* (Summer 1987), p. 29.

13 Ibid., p. 30.

Historic geology relies chiefly on paleontology, the study of fossil organisms. . . . The geologist utilizes knowledge of organic evolution, as preserved in the fossil record, to identify and correlate the lithic records of ancient time.¹⁴

This particular quotation is from an older, much-used, textbook, but the situation is no different today. Indeed, it is so widely known that *all* the natural sciences — biological, physical, and geological — are everywhere today structured within an evolutionary framework that even this brief documentation may seem redundant.

It may *not* be so widely recognized, however, that even the social sciences and humanities are permeated with evolutionism — possibly even more so than the natural sciences. Therefore, we need especially to look at these.

The Social Sciences

As an introduction to the impact of evolutionism on the whole field of modern so-called “liberal arts,” the following evaluation appeared recently in what is probably the most influential weekly in the entire field of higher education:

The social and conceptual revolution that we are now witnessing . . . can be traced back to Darwin. The cultural holists . . . are using evolutionary and ecological concepts to explain social conflict and social change. As revolutionary as their work may appear to conservative scholars, it is grounded in the evolutionary model that scientists no longer question.¹⁵

When one turns to the social sciences, it is soon apparent that these have been more influenced by evolutionary thought than even the biological sciences. Psychology, the study of the mind, is almost entirely based on the assumption that man is only an animal, derived by evolutionary descent from an ape-like ancestor. This was the view of Sigmund Freud, who has exerted probably the greatest single influence on the structure of modern psychology. It is a common saying that, as Darwin banished God from life, Freud drove Him from the soul. Freud’s proverbial emphasis upon the “unconscious” and on uninhibited sexual freedom were both based squarely upon man’s supposed brute ancestry.

14 O.D. von Engeln and K.E. Caster, *Geology* (New York, NY: McGraw-Hill Publishers, 1952), p. 423.

15 Betty Jean Craig, “The Pursuit of Truth is Inherently Disruptive and Anti-Authoritarian,” *Chronicle of Higher Education* (January 6, 1993), p. A56.

The same can be said in varying degrees about the contributions of James, Watson, Jung, Skinner, and other founders and leaders of psychology, including the so-called humanistic psychologists of the present day. Dr. Rene Dubos of the Rockefeller Institute, in a national Sigma Xi–Phi Beta Kappa lecture, noted this as follows:

Many aspects of human behavior which appear incomprehensible, or even irrational, become meaningful when interpreted as survivals of attributes which were useful when they first appeared during evolutionary development and which have persisted because the physical evolution of man came to a relative halt about 150,000 years ago. Phenomena ranging all the way from the aberrations of mob psychology to the useless disturbances of metabolism and circulation which occur during verbal conflicts at the office or at a cocktail party are as much the direct consequences of the stimuli which were their immediate causes. The urge to control property and to dominate one's peers are also forms of territoriality and dominance among most if not all animal societies.¹⁶

Even the apparent intelligence and purposeful actions which are characteristic of man are believed to be merely products of the random, purposeless evolutionary process. Dr. Hudson Hoagland, then president of the American Academy of Arts and Sciences, said this, for example:

But man himself and his behavior are an emergent product of purely fortuitous mutations and evolution by natural selection acting upon them. Non-purposive natural selection has produced purposive human behavior.¹⁷

Such writers rarely bother to concern themselves about the obvious contradiction of these concepts with the scientific law of cause and effect, since they regard evolution as simply having in some mysterious way transcended this law. In short, with the exception of a very small minority today, the professions of psychology and psychiatry are characterized by a strong commitment to evolution and by animosity toward biblical Christianity.

16 Rene Dubos, "Humanistic Biology," *American Scientist*, vol. 43 (March 1965), p. 10–11.

17 Hudson Hoagland, "Science and the New Humanism," *Science*, vol. 143 (January 10, 1964), p. 113.

Turning to the field of sociology, one quickly discovers that the study of man's cultures and societies is universally cast in the same mold as the study of his presumed biological evolution.

A second kind of evolution is psycho-social or cultural evolution. This is unique to man. Its history is very recent; it started roughly a million years ago with our hominid tool-making ancestors. . . . In the last 300 years the ever-accelerating developments through science are a continuation of this psycho-social evolution, which, in terms of progress, is thousands of times faster than biological evolution resulting from genetic mutations.¹⁸

Similarly, one of the leading social scientists of the past half century, Dr. Harry Elmer Barnes, has said this:

Unquestionably the most potent influences contributing to the rise and development of truly historical sociology were Spencer's theory of cosmic evolution and the Darwinian doctrine of organic evolution and their reactions upon social science.¹⁹

Moreover, Alan Lomax of the Bureau of Applied Social Research at Columbia University, concluded an important worldwide study of cultural characteristics as follows:

For almost a century, the intellectual atmosphere of the world has been poisoned by a false Darwinism that judged human social development as the survival of the fittest — that is, of the most successfully aggressive individuals and societies.²⁰

It is a matter of great concern to Christian parents and pastors that evolution is taught as fact in practically all public schools and at all grade levels. Science and social studies textbooks invariably support evolution. It is encouraging that organized opposition to this clearly unfair and unconstitutional state of affairs has developed in practically every state, with strong citizens' groups advocating a return to a more balanced approach to the study of origins. It is not as well-known, however, that

¹⁸ Ibid.

¹⁹ Harry Elmer Barnes, *Historical Sociology* (New York, NY: The Philosophical Library, 1948), p. 13.

²⁰ Alan Lomax, with Norman Berkowitz, "The Evolutionary Taxonomy of Culture," *Science*, vol. 177 (July 22, 1972), p. 239.

not only in organized courses, but even in the very philosophy and methodology of the entire public education approach, evolutionary assumptions have been at the foundation. The curricular content, the “self-discovery” emphasis on social change, and many other aspects of modern educationism are founded on evolutionary assumptions. The determinative influence of John Dewey and his disciples on modern education, of course, speaks for itself.

Modern textbooks of world history almost invariably begin with the standard evolutionary development of the world and man, supplemented by the evolutionary interpretation of developing nations, races, and classes. This kind of approach was, of course, made to order for the Marxist and Nazi distortions of history, as will be discussed shortly. Even apart from these, however, historical interpretations today are thoroughly permeated with evolutionary assumptions. Therefore, H. J. Muller, in speculating about pre-historical cultural development, once said:

Another factor that must have facilitated cultural evolution in the past is a kind of non-genetic natural selection operating between different groups, and between portions of a group, so as to favor more the continuance and spread of those whose cultures were more conducive to their own survival and increase.²¹

It is also well-known that the most influential of our modern historians, men such as Charles Beard and Arnold Toynbee, have uniformly been committed to doctrinaire evolutionary concepts of history, both ancient and modern.

There are, of course, a great many different philosophies, but all of them — except a genuine biblical philosophy — are evolutionary philosophies. Most of those now prominent are essentially variant forms of naturalism. The philosophies of Karl Marx and Friedrich Nietzsche — the forerunners of Stalin and Hitler — have been particularly baleful in their effects. Both were dedicated evolutionists. Perhaps the most influential American philosopher was John Dewey, and his philosophy also was built on Darwinism and pantheistic humanism.

Dewey was the first philosopher of education to make systematic use of Darwin’s ideas.²²

21 H.J. Muller, “Human Values in Relation to Evolution,” *Science*, vol. 127 (March 21, 1958), p. 628.

22 Christian O. Weber, *Basic Philosophies of Education* (New York, 1960), p. 252.

The humanities include literature and the fine arts, as well as philosophy and history. There is such a gulf between the sciences and the humanities that they have actually been widely referred to as the “two cultures.” However, in terms of the basic world views which they hold, they are one. The humanities, no less than the natural sciences and the social sciences, regard man as the naturalistic product of his environment. The philosophy, morality, esthetics, and other aspects of modern humanism all are rooted in naturalism and evolutionism.

Evolutionary concepts are applied also to social institutions and the arts. Indeed, most political parties, as well as schools of theology, sociology, history, or arts, teach these concepts and make them the basis of their doctrines. Thus, theoretical biology now pervades all of western culture indirectly through the concept of progressive historical change.²³

One need only explore modern literature, listen to modern music, watch modern drama, or view modern art to become quickly convinced that they are all pervaded (and perverted) by a spirit of amoralism and atheism that can be grounded only in the belief that science has proved that man is an animal and God is dead.

Ethics and Religion

Once man has rejected the Bible and other religious authority, there is no more divine constraint toward honesty or purity or charity or any of the other ethical values associated with divine revelation.

An ethical system that bases its premises on absolute pronouncements will not usually be acceptable to those who view human nature by evolutionary criteria.²⁴

Nevertheless, man cannot survive in chaos and anarchy, and, therefore, he must have some kind of ethical standard. Since “science” has taken away his former guide, many scientists feel constrained to provide, in substitution, a new “scientific ethics,” and the scientific journals frequently carry articles devoted to this theme.

And what is the basis of this scientific ethics? Why, evolution, of course!

Moreover, scientific thought and its devotion to truth are themselves a product of the evolutionary process, and must

²³ Rene Dubos, “Humanistic Biology,” p. 6.

²⁴ Arno G. Motulsky, “Brave New World?” *Science*, vol. 185 (August 23, 1974), p. 654.

therefore have proved themselves, hitherto at any rate, to have survival value.²⁵

In fact, there seems to be an increasing clamor from evolutionary scientists that they could and should direct future evolution and human societies in accord with their concept of a scientific evolutionary system of ethics. H. J. Muller affirms this:

It is high time for modern man, everywhere, again to revise his concepts of values, in accord with the utterly new view that science, and especially evolutionary science, has given him of the nature of the world and of his actual and potential relations to it.²⁶

Two leading evolutionists have expressed cogently what most of them believe. Ethical systems have no basis in divine revelation; they are merely products of natural selection:

Morality, or more strictly our belief in morality, is merely an adaptation put in place to further our reproductive ends. . . . In an important sense, ethics as we understand it is an illusion fobbed off on us by our genes to get us to cooperate.²⁷

Even the ethical norms incorporated in religious systems are said to be merely a product of evolutionary struggle in the past. A prominent “religious” member of the Dead Sea Scrolls editing team has said this:

For what religious man came eventually to think of as “conscience” is simply the faculty that enabled his hominid ancestors to inhibit their programmed response to stimuli in the interests of some longer-term advantage. “Guilt” is the unease that accompanies and sometimes motivates that control, and “god” is the idealist projection of the conscience in moral terms.²⁸

Almost a hundred years ago John Dewey, the architect of our modern system of public education, gave a profoundly influential address on the subject of evolution and ethics. He climaxed his presentation with the following sweeping generalizations:

25 Walter R. Brain, “Science and Antiscience,” *Science*, vol. 148 (April 9, 1965), p. 197.

26 H.J. Muller, “Human Values in Evolution,” p. 628.

27 Michael Ruse and Edward O. Wilson, “Evolution and Ethics,” *New Scientist*, vol. 203 (October 17, 1985), p. 51.

28 John Allegro, “Divine Discontent,” *American Atheist*, vol. 28 (September 1986), p. 26.

There are no doubt sufficiently profound distinctions between the ethical process and the cosmic process as it existed prior to man and to the formation of human society. So far as I know, however, all of these differences are summed up in the fact that the process and the forces bound up with the cosmic have come to consciousness in man. That which was instinct in the animal is conscious impulse in man. That which was “tendency to vary” in the animal is conscious foresight in man. That which was unconscious adaptation and survival in the animal, taking place by the “cut and try” method until it worked itself out, is with man conscious deliberation and experimentation. That this transfer from unconsciousness to consciousness has immense importance, need hardly be argued. It is enough to say that it means the whole distinction of the moral from the unmoral.²⁹

Long ago, Thomas Henry Huxley, the famous evolutionary propagandist, clearly recognized that evolutionary history implied a basic principle in nature of aggressive self-interest. The great evolutionary slogans of the time — “struggle for existence” and “survival of the fittest” — clearly suggested a naturalistic ethic that continually pitted individuals, races, species, classes, and nations against each other. Huxley also saw that this system squarely contradicted the Christian ethic, and made this the theme of his Romanes lectures, *Evolution and Ethics*. In the present century, one of the leading evolutionists of the interwar period, Sir Arthur Keith, published another influential book with the same title. The entire volume amplifies and reinforces the theme of Huxley; namely, that the ethics taught by Christ and by evolution are polar opposites. Among other things, he argued that:

If the final purpose of our existence is that which has been and is being worked out under the discipline of evolutionary law, then, although we are quite unconscious of the end result, we ought, as Dr. Waddington has urged, to help on “that which tends to promote the ultimate course of evolution.” If we do so, then we have to abandon the hope of ever attaining a universal system of ethics; for, as we have just seen, the ways of national evolution, both in the past and in the present, are cruel, brutal, ruthless, and without mercy.³⁰

29 John Dewey, “Evolution and Ethics,” reprinted in *Scientific Monthly* (February 1954), p. 66. Originally published in *The Monist*, vol. 8 (1897–1901).

30 Sir Arthur Keith, *Evolution and Ethics* (New York, NY: Putnam, 1947), p. 15.

Sir Arthur adds another interesting observation with the following:

It was often said in 1914 that Darwin's doctrine of evolution had bred war in Europe, particularly in Germany. An expression of this belief is still to be met with. In 1935 a committee of psychologists, representing thirty nations, issued a manifesto in which it was stated that "war is the necessary outcome of Darwin's theory. . . ." The law of evolution, as formulated by Darwin, provides an explanation of wars between nations, the only reasonable explanation known to me.³¹

Of course, the Christian would say, rather, that wars result from sin, and that the only hope for permanent peace is in Jesus Christ. But it is clear that the inexorable logic of evolutionary reasoning leads directly to the conclusion that war and struggle are the chief good, leading to evolutionary advance:

Meantime, let me say that the conclusion I have come to is this: the law of Christ is incompatible with the law of evolution — as far as the law of evolution has worked hitherto. Nay, the two laws are at war with each other; the law of Christ can never prevail until the law of evolution is destroyed.³²

Now, admittedly, such views are not shared by most modern evolutionists, especially in America, where war suddenly became unpopular during the Viet-Nam conflict. Nevertheless, Sir Arthur was recognized by many to be one of the greatest evolutionists of modern times, and he had given more study to this subject of evolutionary ethics than any of his contemporaries. Many modern evolutionists like to stress "cooperation" as a viable force in evolutionary advance, but they do so without much conviction. Even such a cautious scientist as Dr. Frederick Seitz, when serving as president of the National Academy of Sciences, said the following:

We can, of course, be grateful to nature for the highly remarkable genetic gifts which we have inherited as a result of the very complex process of selection which our ancestors experienced. We must also keep in mind, however, that many

³¹ Ibid., p. 149.

³² Ibid., p. 15.

of our most valued characteristics probably emerged out of interhuman competition. We probably have instinctive patterns of behavior which are fundamentally inimical to human cooperation on an indefinitely broad scale.³³

Not even the domain of religion has escaped the influence of evolution. We should remember the classic diatribe of Sir Julian Huxley, who could probably be justly identified as the world's premier evolutionist of the 20th century. As the keynote speaker at the great Darwinian Centennial Convocation in 1959 at the University of Chicago, he orated as follows:

In the evolutionary system of thought there is no longer need or room for the supernatural. The earth was not created; it evolved. So did all the animals and plants that inhabit it, including our human selves, mind and soul, as well as brain and body. So did religion. Evolutionary man can no longer take refuge from his loneliness by creeping for shelter into the arms of a divinized father figure whom he himself has created.³⁴

Of course, with the weight of all the leading scientific authorities on the side of evolution, religious leaders around the world have felt it necessary to devise systems for accommodating their faiths within the evolutionary framework. This has been a relatively easy adjustment for most of the non-Christian religions, which were all fundamentally evolutionary systems anyway.

Buddhism and Hinduism, with their doctrines of *karma* and their pantheistic conceptions of God; Confucianism and Taoism, with their essentially agnostic attitude toward the idea of a personal God; and Shintoism, with its deification of man and the state, are all fundamentally evolutionist in philosophy, so they quickly and easily adapted themselves to the Darwinian approach within the framework of their own systems.

The same is true of the animistic faiths, whenever their practitioners become sufficiently sophisticated in their understanding of the modern world through education (often, sad to say, provided by "Christian" nations, and even sometimes in missionary schools). Fundamentalist missionaries in Africa and other areas of tribal religions report that the

33 Frederick Seitz, "Science and Modern Man," *American Scientist*, vol. 54 (September 1966), p. 230.

34 Sir Julian Huxley, *Associated Press* dispatch (November 27, 1959).

teaching of evolution in the schools, together with its adaptation as a veneer over revived demon worship, is today one of the most serious hindrances to the gospel in such lands.

In their primitive form (or, better, degenerate forms, as derived from primitive monotheism in the manner described by the Bible in Rom. 1:18–32), these animistic religions are themselves crudely evolutionist, all believing in some form of magical development of the first men and animals from previous materials. Though they retain in some cases a very faint and impersonal tribal memory of a “high God” of some sort, their practical daily religion has to do altogether with the physical world and its control by the spirits of departed ancestors and demons.

Modern spiritism is essentially the same thing, and this popular religion, together with its varied, associated cults — astrology, witchcraft, satanism, theosophy, Zen Buddhism, and the like — has been in recent years sweeping like wildfire over the world, especially Europe and Latin America. In spite of their individual differences, all such occult religions uniformly make the claim that they are more in accord with the modern scientific evolutionary view of the world than are the traditional religions, especially Christianity, calling themselves religions of the “New Age.”

Even the various pseudo-Christian cults, such as Christian Science, Unity, and others of that kind have commonly accepted evolution into their systems. In somewhat analogous fashion, the parabiblical religions of Judaism and Islam, though nominally committed to faith in the Genesis account of creation, have now largely capitulated to the evolutionary cosmology in their philosophies. Reformed Judaism and Conservative Judaism have almost completely accepted Darwinian evolution and the higher critical views of the Old Testament, and even many Orthodox Jews have adopted a symbolic interpretation of the Genesis record.

The Muslim religious leaders have largely done the same, although there are “fundamentalist” groups who adhere to the literal creation of all things in the beginning by Allah. The Muslim mystics and philosophers, with their wholly transcendent view of God’s nature and their subjective approach to religious experience, have, in fact, for all practical purposes been evolutionary pantheists all along.

In general, it is realistic to say that nearly the whole world of religion — Christian, non-Christian, and quasi-Christian alike — has accepted the evolutionary cosmology in one form or another.

Some uninformed Christians might object that, surely, Christian people still reject evolution. However, this is not true at all, at least for the

majority of Christian self-styled “intellectuals,” and many others who follow their lead.

The history of organized Christianity in the past century has been in large measure a sad record of compromise and retreat before the attacks of the evolutionists. In the 19th century, the so-called “higher criticism” launched its attacks against the authenticity of the Old Testament, especially the books of Moses, leading to the “documentary hypothesis” of the composition of the Old Testament writings. Many conservative seminaries and Bible schools today devote much study to the refutation of this higher criticism, but they ignore the evolutionary philosophy that spawned it.

Sometimes people talk as though the “higher criticism” of texts in recent times has had more influence than the higher criticism of nature. This seems to me to be nonsense. The higher criticism has been simply an application of an awakened critical faculty to a particular kind of material, and was encouraged by the achievement of this faculty to form its bold conclusions. If the biologists, the geologists, the astronomers, and the anthropologists, had not been at work, I venture to think that the higher critics would have been either non-existent or a tiny minority in a world of fundamentalists.³⁵

Even Bible-believing Christians who reject the higher-critical views of Genesis have again and again tried to compromise with evolution by novel exegetical twists of Genesis. This is always only a superficial and temporary stratagem, and it inevitably culminates in a reinterpretation of the entire Christian faith to correlate with the full-orbed evolutionary view of the world and society. Today, almost all of the colleges and seminaries of the large denominations, even those that are assumed to be conservative, have incorporated the evolutionary system and its associated liberal or neo-orthodox theology into their teachings.

Moreover, many schools that until recent years were strongly fundamental and anti-evolutionary are now allowing theistic evolution (or its semantic substitute, progressive creation) as a legitimate position for their faculty to teach if they so choose. This compromise has already in many instances been followed by a weakened doctrine of biblical inspiration, and increased conformity to the world in areas of morals and social activism.

35 F.M. Powicke, *Modern Historians and the Study of History, Essays* (London, 1955), p. 228.

The documentation in this chapter could easily be multiplied many-fold.³⁶ What has been included, however, should certainly confirm the fact that evolutionism is not a peripheral matter of concern to only a few specialists. The fact is that evolutionary thought is of paramount and fundamental importance in every field of science and education today. Christians ignore it or compromise with it only at great peril to their faith and that of their children. The anomaly here is that it is so widely accepted as truth, when it contradicts all revelation in Scripture, as well as all the real facts of science (see Volumes 1 and 2 of this Trilogy). Finally, as shown later in this volume, it has also done tremendous harm through all its societal implications and applications.

36 See the Henry M. Morris book *The Long War against God* (Grand Rapids, MI: Baker Book House, 1989), p. 17–52, for further discussion and documentation of the pervasive (and pernicious) influence of evolution in science and education.

Chapter 2

The Long History of Evolutionism

In order really to understand the amazingly pervasive influence of evolutionism in the world today, as discussed in the preceding chapter, we also must understand and appreciate its long and widespread influence in past history. Evolutionism definitely did not begin with Charles Darwin, as most people assume today.

The Darwinian Century

In the previous chapter we have traced the extensive influence of the evolutionary philosophy as it has affected almost every discipline and segment of modern culture, especially in the educational system. Obviously, such profound and widespread effects must have an adequate background cause. This did not all happen by chance, nor did it develop overnight. There has been a long history of evolutionary thought, and there have been powerful forces at work to bring about its universal acceptance. Especially must this be true in view of the fact that both the inspired Word of God and all the real data of science support creation rather than evolution. In this chapter, therefore, we shall in outline fashion attempt to trace some of this history, especially the pre-Darwinian history, of evolution.

The theory of evolution as held today is, of course, associated most commonly with Charles Darwin. It is doubtful whether any other scientist has ever received as much praise and adulation as has Darwin. He was even honored in what amounted almost to a religious worship service in a great convocation held in 1959 at the University of Chicago, on the occasion of the 100th anniversary of the publication of his famous book

The Origin of Species by Natural Selection. On the anniversary year of his death (1982) there was another outpouring of ritual praise.

And yet the actual scientific accomplishments of Charles Darwin were relatively insignificant, at least by modern standards. The only college degree he earned was in theology, and that was based on a very undistinguished record. He was not inclined toward a career as a clergyman, and was in fact only a nominal believer in Christianity, at most. He became a biologist more or less by accident, spending five years on an extended voyage around the world as a ship's naturalist on the *Beagle*. This voyage began in 1831 when he was only 22 years old. It was at this time that he read Lyell's *Principles of Geology*, which, added to his previous reading of Thomas Malthus' *Principles of Population* and his own observations on the fauna of the South Pacific islands, eventually led to his full acceptance of evolution and his postulation of natural selection as its mechanism.

Darwin also published studies on barnacles, vegetable mold, and other more restricted biological subjects, but these were hardly of great significance. It was clearly his *Origin of Species* which acquired for him his super-reputation.

This situation is odd, however, for Charles Darwin certainly was not the inventor of the theory of evolution, as many suppose.

The idea of evolution had been widespread for more than 100 years before 1859. Evolutionary interpretations were advanced increasingly often in the second half of the 18th and the first half of the 19th centuries.¹

Neither did Darwin originate the idea of natural selection, although this was his frequent boast. As a matter of fact, he rushed his book into print before he was ready (although he had been working on it for well over 20 years), in the fear that Alfred Wallace would publish his own identical theory first:

Wallace independently achieved and set forth the same ideas as Darwin. He was an independent discoverer of natural selection.²

For that matter, at least ten other writers are known to have discussed the concept of natural selection before either Darwin or Wallace did so.

1 Ernst Mayr, "The Nature of the Darwinian Revolution" *Science*, vol. 176 (June 2, 1972), p. 981.

2 Loren C. Eiseley, "Alfred Russel Wallace," *Scientific American*, vol. 200 (February 1959), p. 70.

Nevertheless, Darwin's renowned book *The Origin of Species by Natural Selection* was published in 1859 and immediately created a storm of controversy that has continued for more than 135 years! It is an interesting comment on the temper of the times, and of man's eagerness to discover a justifiable excuse for rejecting God as his Creator, that the first edition of the *Origin* was sold out before it was published.

Despite considerable opposition at first, Darwin's theories were soon largely accepted, both by scientists and religionists. The post-Darwinian century has beyond doubt, almost from the first, been one in which evolutionary thought has reigned virtually unchallenged. There have been so many volumes written on this subject that it is essentially common knowledge.

The most significant fact about Darwin is not his stature as a scientist but his influence as a symbol. His contribution came at just the right time to catalyze an explosive reaction, transforming in one generation a society that was already seething with inner rebellion against the predominant theological and biblical view of the world, into a humanity in open and often violent rebellion against its Creator.

Darwin has often been called the "Newton of biology," but Jacques Barzun showed that this was a "very loose description indeed." Barzun (professor of history and dean of the Graduate Faculties at Columbia University for many years) noted:

Darwin was not a thinker and he did not originate the ideas that he used. He vacillated, added, retracted, and confused his own traces. As soon as he crossed the dividing line between the realm of events and the realm of theory he became "metaphysical" in the bad sense. His power of drawing out the implications of his theories was at no time very remarkable, but when it came to the moral order it disappeared altogether, as that penetrating evolutionist, Nietzsche, observed with some disdain.³

Nevertheless, despite Darwin's serious deficiencies as a scientist, thinker, and writer, Barzun also acknowledged his unprecedented influence.

Clearly, both believers and unbelievers in natural selection agreed that Darwinism had succeeded as an orthodoxy, as a rally point for innumerable scientific, philosophical, and social movements. Darwin had been the oracle and the *Origin of*

3 Jacques Barzun, *Darwin, Marx, Wagner*, 2nd ed. (Garden City, NY: Doubleday and Co., 1959), p. 84.

Species the “fixed point with which evolution moved the world.”⁴

Nevertheless, as we trace the history of the development and influence of evolutionary thought, it becomes evident that neither Charles Darwin nor his famous book provides the answer. We must look deeper and further than Darwin to find the real roots of evolutionism and its worldwide influence.

Why Darwin?

Although the name of Charles Darwin is honored — in fact almost revered by many — as the founder of the modern theory of evolution, it is largely an artificial and manufactured identification. As we have just noted, his name serves a purpose as a sort of symbol and rallying point for evolutionists, but his actual scientific accomplishments were rather ordinary and unimpressive by modern standards. Although many intellectuals seem to feel that it is sort of a union card to pay homage to him, one senses in their writings a feeling that they are not comfortable with this nor quite clear what it is that they admire in Darwin and his work. There seems to be something in these responses that has never yet been satisfactorily understood or explained. In fact, a leading modern evolutionist reminds us:

Darwin . . . never really addressed the “origin of species” in his book of that title.⁵

The theory of evolution did not originate with Charles Darwin, of course, as noted above. Various evolutionary concepts were accepted by many people long before Darwin. His main contribution was the theory of natural selection as an evolutionary mechanism, but even this was not original with him. In an authoritative review of the origins of Darwinism, an eminent British biologist asserts the following:

As to the means of transformation, however, Erasmus Darwin originated almost every idea that has since appeared in evolutionary theory. . . . All three men (i.e., William C. Wells, James C. Pritchard, and William Laurence) advanced explicitly and in detail the alternative theory of natural selection foreshadowed by Erasmus Darwin. These three communications

4 Jacques Barzun, *Darwin, Marx, Wagner*, 2nd ed. (Garden City, NY: Doubleday and Co., 1959), p. 69.

5 Niles Eldredge, “Progress in Evolution?” *New Scientist*, vol. 110 (June 5, 1986), p. 55.

were the first clear statements of such an idea — in opposition to notions of evolution guided by design and purpose — since classical times.⁶

Erasmus Darwin was Charles Darwin's grandfather and was a widely read and popular writer on evolution even before Charles was born. Wells, Pritchard, and Laurence were all physicians who wrote on evolution and natural selection almost a half-century before *The Origin of Species*. Diderot in France, Edward Blyth in England, and even Benjamin Franklin advanced similar theories. However, Charles Darwin never acknowledged his predecessors and always called natural selection "my theory."

He was also much influenced by other evolutionary predecessors such as Lamarck, who was most famous for his theory of evolution by acquired characters, and Chambers, who had advocated a form of pantheistic evolution in an influential book called *Vestiges of the Natural History of Creation*. Although Darwin denounced Lamarck's theory, he later superimposed much of it on his own theory.

Darwin was also much influenced by Thomas Malthus and his concept of the "struggle for existence" among human populations. But probably his most important immediate predecessor was Charles Lyell, with his geological dogma of uniformitarianism. The supposed vast span of geologic time was, of course, an absolute necessity for any viable theory of evolution. Darwin frequently acknowledged his debt to Lyell, who was his close friend and advisor, even though he was always reluctant to give credit to his other forerunners. Lyell rejected the predominant catastrophist theory of geology and persuaded his contemporaries that all the geologic strata had been laid down slowly over vast periods of time. Darwin found this framework made to order for his ideas of natural selection, which would certainly require tremendous stretches of time to be effective.

Darwin and Wallace were Lyell's intellectual children. Both would have failed to be what they were without the *Principles of Geology* to guide them.⁷

With respect to the so-called "evidences for evolution," these had been well expounded long before 1859. Even during the Darwin centennial year, Darlington commented:

6 C.D. Darlington, "The Origin of Darwinism," *Scientific American*, vol. 201 (May 1959), p. 62.

7 Loren C. Eiseley, "Charles Lyell," *Scientific American*, vol. 201 (August 1959), p. 106.

In favor of the evolution of animals from “one living filament,” Erasmus Darwin [who died before Charles was born] assembled the evidence of embryology, comparative anatomy, systematics, geographical distribution and, so far as man is concerned, the facts of history and medicine. . . . These arguments about the fact of transformation were all of them already familiar. As to the means of transformation, however, Erasmus Darwin originated almost every important idea that has ever appeared in evolutionary theory.⁸

It does seem strange that Charles Darwin would never acknowledge his intellectual debt to these predecessors, especially his own grandfather, whose books he had certainly read. His admirers speak of him as though he were a paragon of the careful, open-minded scientist — humble, interested solely in the hard-headed observation and understanding of facts. One of these admirers, George Gaylord Simpson, in a review of Darwin’s autobiography, commented thus:

Darwin himself . . . wrote he “never happened to come across a single naturalist who seemed to doubt about the permanence of species,” and he acknowledged no debt to his predecessors. These are extraordinary statements. They cannot be literally true, yet Darwin cannot be consciously lying, and he therefore may be judged unconsciously misleading, naive, forgetful, or all three. His own grandfather, Erasmus Darwin, whose work Charles knew very well, was a pioneer evolutionist. Darwin was also familiar with the work of Lamarck, and had certainly met a few naturalists who had flirted with the ideas of evolution. . . . Of all this, Darwin says that none of these forerunners had any effect on him. Then, in almost the next breath, he admits that hearing evolutionary views supported and praised rather early in life may have favored his upholding them later.⁹

Simpson tries to excuse him in the same manner as the writer of his biography, Nora Barlow, his granddaughter, who said that Darwin had simply dismissed all these predecessors because they did not back up their

8 C.D. Darlington, “The Origin of Darwinism,” p. 61–62.

9 George G. Simpson, “Charles Darwin in Search of Himself,” review of *Autobiography of Charles Darwin*, by Nora Barlow, *Scientific American*, vol. 200 (August 1959), p. 119.

theories with evidence. Of course, when it comes to real *evidence*, Charles Darwin had none either. He may have found examples in which natural selection was effective in weeding out unfit varieties, but none in which natural selection *produced* new favorable characteristics that could not have resulted from normal variations within the kind.

The most illustrious of Darwin's evolutionist predecessors was probably Jean-Baptiste de Lamarck. He had, of course, proposed as his evolutionary mechanism the inheritance of acquired characteristics, and had written in great depth upon the process and meaning of evolution. Darwin bitterly attacked Lamarck's ideas, yet later he gradually incorporated many of them into his own system, including a modified form of acquired character inheritance.

Darlington said:

Darwin was slippery . . . [using] a flexible strategy which is not to be reconciled with even average intellectual integrity. . . . He began more and more to grudge praise to those who had in fact paved the way for him. . . . Darwin damned Lamarck and also his grandfather for being very ill-dressed fellows at the same moment he was engaged in stealing their clothes.¹⁰

There was also Herbert Spencer, whose writings had a profound influence on the acceptance of evolution in the 19th century. It was Spencer who coined the Darwinian phrases "struggle for existence" and "survival of the fittest," and he also was writing on evolution for some time before Darwin began to do so.

In his own day, which was that of Darwin, too, Spencer was regarded as a giant, and his *Principles of Biology* was adduced as one of the chief evidences for this high estimation. Of course, this could not be on literary grounds. Spencer is no more a first-class stylist than Darwin. . . . Had Darwin and Spencer been more tendentious men, they would doubtless have become embroiled in Newton-Leibniz disputes regarding priorities. . . . It would be difficult to establish the interlocking priorities here. Spencer's preliminary essays were published some time before *The Origin of Species*.¹¹

10 C.D. Darlington, *Darwin's Place in History* (London, 1959), p. 60, 62.

11 George Kimball Plochmann, "Darwin or Spencer?" *Science*, vol. 130 (November 27, 1959), p. 1452.

We should also, of course, mention Thomas Huxley, who was probably more responsible than any other single person for the rapid and widespread acceptance of Darwinian evolution, through his constant and effective speaking and writing. Huxley was an evolutionist before Darwin, but the latter's book gave him the needed scientific support for it, or so he thought. He became known as "Darwin's bulldog."

Huxley opposed not only creationism, but Christianity in general, lecturing against the resurrection of Christ and other biblical truths, and applying to himself the term *agnostic*, which he invented. That he was not without ulterior motives in all this is evinced by the fact that Huxley had a driving ambition for fame and historical recognition:

He had a work to do in England, a messianic purpose, and he dedicated to that purpose his tireless energy and his vast resources of knowledge and ability. And he did attain the success his heart desired, for Huxley was recognized as a prophet in his own country.¹²

Therefore, in no sense could Charles Darwin be said to be responsible for the theory of evolution. The remarkable chain of events leading up to the publication of his book, and the even more remarkable results of its publication, have not even yet been satisfactorily explained. One thing is sure — it was not simply the instant triumph of science over superstition that evolutionary propagandists like to suppose. Darlington says this about Darwin's surprising success:

He was able to put his ideas across not so much because of his scientific integrity, but because of his opportunism, his equivocation and his lack of historical sense. Though his admirers will not like to believe it, he accomplished his revolution by personal weakness and strategic talent more than by scientific virtue.¹³

These developments, of course, were not taking place in a vacuum. Most scientific writers on the history of evolution write as though the whole story is simply one of the advance of science, and of the delivery of mankind from the cloud of ignorance and superstition that had covered humanity before Darwin. But the middle of the 19th century was a time

12 Charles S. Blinderman, "Thomas Henry Huxley," *Scientific Monthly* (April 1957), p. 172.

13 C.D. Darlington, "The Origin of Darwinism," p. 66.

of great political and social ferment, and scientists as well as others were being caught up in these movements. Europe was still involved in the aftermath of the French Revolution, and other revolutionary movements were seething everywhere. Socialism and Communism were familiar terms, and so was anarchism. These were the times of Hegel and Karl Marx, of the industrial revolution and the American Civil War, of Nietzsche and the growth of economic imperialism.

It has become almost a cliché that “evolution was in the air” and, for that matter, so was “revolution.” All the great political and economic movements — whether communism, economic imperialism, centralized capitalism, racism, or others — were all eager to embrace Darwinism as scientific justification for their particular brands of man’s basic self-centered struggle-and-survival ethic.

Although faith in the Bible and creation was still very strong in both Europe and America, resulting from the spiritual revivals of the Reformation Period and of the Great Awakening, there had been strong undercurrents of unbelief for a long time. Subversive revolutionary movements were influencing multitudes. Deist philosophers, Unitarian theologians, Illuminist conspirators, Masonic syncretists, and other faith-mongers were all exerting strong influences away from biblical Christianity and back to paganistic pantheism.

The French Revolution had injected its poisons of atheism and immoralism into Europe’s bloodstream, and the German rationalistic philosophers had laid the groundwork for the destruction of biblical theology in the schools and churches. Socialism and Communism were on the upswing throughout Europe; Marx and Nietzsche were propagating their deadly theories and were acquiring many disciples — perhaps also financial backers, as students of conspiracies have frequently suggested. All these people and movements were evolutionists of one breed or another.

Significantly, all the above movements and many others of like kind had rejected the biblical cosmology and followed an evolutionary cosmology as their basic rationale. However, there were two strong barriers holding back the tide of paganism. In the first place, the Christian churches and schools had been strengthened by the works of many great Christian apologists (e.g., Paley, Lyttelton, West, Butler, Edwards, Dwight, *et al.*), whose labors had all but demolished the systems of deism and Unitarianism.

In the second place, the Industrial Revolution had drastically increased public awareness and respect for science and technology, and the

great scientists of the day were mostly Bible-believing Christians. Scientific philosophy was structured largely around natural theology, and scientific study was considered to be, as the great Isaac Newton had said, “thinking God’s thoughts after Him.” All the data of natural science were understood as supporting the facts of divine creation and providence; even the sediments and fossils of the new science of geology were understood in terms of the great worldwide Flood.

Sir Isaac Newton is generally acknowledged to have had the greatest scientific intellect of all time, and the weight of his immense authority had long been cited in favor of belief in the full authority of the Bible. He, as did his colleague at Cambridge, John Woodward, believed in the literal creation account of Genesis, as well as that of the worldwide Flood. In fact, Newton was a follower of the eminent scholar Archbishop James Ussher, whose biblical chronology is unjustly ridiculed today by multitudes who exhibit only a small fraction of the ability and careful scholarship that Ussher manifested in his day.

In fact, the period from 1650 to 1880 was an era of scientific giants, and many of the greatest among them — men such as Pascal, Faraday, Maxwell, and Kelvin — were men who believed in the inspiration and authority of the Bible. The marvelous discoveries and achievements of science, revealing the complexities and orderly relationships in nature, seemed more and more to confirm the fact of design and, therefore, the existence of a Creator.¹⁴

Consequently, if the great complex of anti-Christian movements and philosophies was to be successful in its struggle for control of the minds and hearts of men, something would have to be done first of all to undermine biblical creation and to establish evolution as the accepted cosmogony. The biblical doctrine of origins, of course, is foundational to all other doctrines, and if that could be refuted, or even diluted, then eventually the other doctrines of biblical theology would be undermined and destroyed.

The powerful argument from design in nature, as evidence for God and His creation, would need to be explained by some other means, some naturalistic means, before evolution could really become acceptable to most people. And such a new explanation would need to be a “scientific” explanation, or sufficiently so to convince the scientific community that it would really explain and confirm evolution. If the scientists could be converted to evolution, then the science-honoring public would soon go

¹⁴ See the Henry M. Morris’ book *Men of Science, Men of God*, for brief biographies and testimonies of over 100 great Bible-believing scientists of the past (Green Forest, AR: Master Books, 1988).

along, especially in view of man's basic tendency to rebel against God anyhow.

For a while, it seemed that Lamarck's theory of evolution by the inheritance of acquired characters would serve the purpose. The theory had a superficial appearance of plausibility and did seem to provide an alternate explanation for the evidences of design in nature. Lamarck, with his own bitter hatred of the Bible and Christianity, argued his theory very forcefully and persuaded many people of its value. Karl Marx and his colleagues followed Lamarck to some extent, and their successors continued to impose it on Communist biology until recent times.

To most people, however, the idea of the inheritance of acquired characters was so contrary to all experience that they could never really take it seriously, much as they might *like* to believe it. Consequently, a better theory was urgently needed, one that would both commend itself to scientists and also be simple enough for the average man to understand and somehow in keeping with his own common sense experience.

The idea of natural selection in the struggle for existence was the perfect solution! Everyone was familiar with the effectiveness of artificial selection in breeding, so why wouldn't the same process work in nature? Add the factor of the great spans of geologic time conveniently provided by Lyell's uniformitarianism, and everything was present to explain away the evidence of design and even the real necessity of a Creator. Or at least this was the way it would seem, and that was all that was necessary.

The time was, therefore, ripe for the Darwinian theory. As noted above, it really wasn't Darwin's theory, but he was the one who was advocating it at the time when it became propitious to renounce Lamarckianism and to adopt natural selection instead. Huxley, Lyell, and others prodded Darwin to publish his book, which he had been painfully working on for many years, and, when published, it soon became famous. Huxley, along with Spencer, Haeckel, and others, immediately opened a relentless evolutionary propaganda campaign, and it wasn't long until essentially the whole world was converted to evolutionism.

One may sense from the foregoing sequence of events intimations of ominous undercurrents contributing to them. The coincidences seem so improbable, and the results so far-reaching, that one can hardly avoid wondering whether the factors culminating in these developments may not have involved more than mere accidents of history.

Evolutionism before Darwin

One important point must be strongly emphasized, if we are to gain a proper appreciation for the vital importance of special creation to true Christianity and to the modern world in general. Evolution is not a modern scientific discovery or breakthrough of some kind. In the first place, it is not scientific at all (as shown in Volume 2 of this Trilogy), but rather a deadly anti-Christian philosophy and world view. Secondly, it did not originate with Charles Darwin or any other modern scientist or group of scientists.

Although it is customary to credit the inception of this theory to Charles Darwin and his immediate predecessors, a rudimentary form of this notion can be traced back to the beginnings of written history itself. In fact, the belief that life had its origins in a single basic substance is so widespread among the various peoples of the world, primitive or civilized, that it can be considered one of the few universal themes in the history of ideas.¹⁵

It is clear that there were many evolutionists before Darwin. In fact, as noted previously, most of the standard present-day textbook “evidences” for evolution were published and well-known long before the *Origin of Species*. However, these views were not predominant, even in the educational world, until the rise of Darwinism. The influence of Christianity had for a long time relegated pagan philosophies to a sort of intellectual underground, and the biblical cosmology was generally accepted in the western world, both by scholars and laymen.

There is no doubt, however, that pagan and gnostic philosophies had exerted some influence on Christian thought, even at the very beginning of church history. These influences are reflected in the frequent uses of allegorical methods of biblical exegesis, attempting to harmonize Scripture with then-current cosmological and philosophical notions, and in the frequent lapse of Christian mystics into a sort of pious pantheism. Both tendencies are often accompanied by evolutionary speculations of various kinds.

During this period it is significant that several of the church fathers expressed ideas of organic evolution even though the trend of ecclesiastical thought led more readily into other lines of reasoning. St. Gregory of Nyssa (A.D. 331–396), St.

15 Ernest L. Abel, *Ancient Views on the Origin of Life* (Fairleigh Dickinson University Press, 1973), p. 15.

Basil (A.D. 331–379), St. Augustine (A.D. 353–430), and St. Thomas Aquinas (A.D. 1225–1274) expressed belief in the symbolical nature of the biblical story of creation and in their comments made statements clearly related to the concept of evolution.¹⁶

It is true, no doubt, that the dominant point of view in Christendom during these years was in support of literal creation. At the same time, it was not true, as often charged, that the concept of a stationary earth and geocentric universe, as held by many of these writers, originated in the Bible. The Bible teaches neither of these things, but the church of those centuries was also largely dominated by the philosophy of Aristotle, and these ideas were part of his system, as well as that of Ptolemy.

It is also generally recognized that the church of the post-Apostolic period down to the very time of the Reformation was much influenced by gnosticism, and by other forms of Greek philosophy. The Christian scholars of those centuries, exactly as many at the present time, felt that it was essential to work out a compromise cosmology which would be acceptable to the intellectuals of their day. This they did by the simple expedient of interpreting the Scriptures allegorically, which technique, of course, can easily convert meanings into anything that one wishes.

This desire to find allegories in Scripture was carried to excess by Origen (185–254) who was likewise associated with Alexandrian thought, and he managed thereby to get rid of anything which could not be harmonized with pagan learning, such as the separation of the waters above the firmament from those below it, mentioned in Genesis, which he takes to mean that we should separate our spirits from the darkness of the abyss, where the Adversary and his angels dwell.¹⁷

As far as the Gnostics themselves were concerned, they were fragmented into many different sects, and it is difficult to generalize about all of them. Most were characterized by an Oriental dualism, and believed in a sharp differentiation between the world of the spirit and the world of matter. The latter was believed to be eternal, rather than specially created by God, and this, of course, is the main pillar of an

16 Arthur Ward Lindsey, *Principles of Organic Evolution* (St. Louis, MO: The C. V. Mosby Co., 1962), p. 21.

17 J.L.E. Dreyer, "Medieval Cosmology," *Theories of the Universe*, ed. Milton K. Munitz (Glencoe, IL: The Free Press, 1957), p. 117.

evolutionary system. The personal incarnation and bodily resurrection of Christ were denied, as well as many of the other central doctrines of Christianity.

For the most part, however, as noted, Christians both in the dominant state churches and in the various smaller groups outside these churches retained their faith in the biblical view of creation. This conviction was especially strengthened by the great increase in Bible circulation following the Reformation and later spiritual awakenings.

As a minority belief, however, evolution was not uncommon. Spontaneous generation had been accepted as common knowledge at least since the time of Aristotle, and was opposed only by a minority of Christians who recognized it as unscriptural. Ideas of transmutation were also widely held, even in the realm of inorganic materials, as evinced by the studies of the alchemists.

Two levels of evolutionary beliefs need to be recognized. At the intellectual level, Greek atomistic philosophies, such as those worked out by Democritus and Leucippus, were highly developed and were accepted by many scholars. The pagan mystery religions were understood and practiced by initiates on a considerably higher plan of sophistication than the popular idol worship of the masses. The Stoic and Epicurean philosophers, the best known of whom is probably Lucretius, were essentially either atheists or evolutionary pantheists. None of the pagan religions or philosophies held any real belief in a personal, omnipotent, eternal Creator, who created all things *ex nihilo* by His omnipotent Word.

The philosophy of Aristotle, who did teach a quasi-creation doctrine while simultaneously advocating spontaneous generation and the eternal pre-existence of the universe, the philosophy of the Stoics, and the various gnostic philosophies, all had significant influence in keeping the pagan cosmologies alive even in the Christian churches. With the Renaissance came a great humanistic revival of pagan philosophies, and these came to real fruit in the full-blown evolutionary cosmologies of Kant and LaPlace, with their nebular hypotheses, of Descartes, with his mechanistic philosophy, of Spinoza and others.

On the popular level, however, the philosophical pantheism of the ancient scholars was expressed in the pantheon of gods and goddesses associated with the pagan religions. When these were finally replaced by Christianity, they went underground, as it were. To some extent, the idols were "baptized" with Christian names, and the old polytheistic nature-worship was incorporated into the customs and practices of the churches. At the same time, the demonic and occultic aspects of paganism were

perpetuated in various forms of witchcraft, which continued to thrive throughout the Middle Ages and even into modern times.

All of these systems — philosophical pantheism, popular polytheism, and occult supernaturalism — are fundamentally evolutionary world views. All were and are bitter opponents of biblical Christianity, rejecting any concept of a personal God, who created all things, including the physical universe itself, by special creation *ex nihilo*. It is from such as these that the modern theory of evolution must trace its ancestry. Diverse though the “gods many” (1 Cor. 8:5) may be in detail, they are all one in their hatred for the true God of creation.

Evolutionism in the Pre-Christian World

The most influential of the Greek philosophers was Aristotle (384–322 B.C.). He, of course, was a student of Plato (427–348 B.C.), and Plato of Socrates (470–399 B.C.). It has been argued whether these men were evolutionists or creationists, and there is no doubt that they did believe in God, as a First Cause, or prime mover. Their cosmogonies are not very specific in detail. However, it is well known that Aristotle believed in spontaneous generation, and that is certainly a form of evolution. Furthermore, he believed in the concept that the world never had a beginning, which doctrine, of course, is totally inconsistent with true creationism.

Like his master Plato, Aristotle insists there is but one world, that is a central body like the earth surrounded by a finite number of planets and stars. This one world, of course, which makes up the entire universe, contains all existent matter. . . . Aristotle argues that the one world or universe we know is eternal, without beginning and without end.¹⁸

Even earlier than these philosophers, however, a much more consistently pantheistic and evolutionary view of the universe was widely believed, and continued to exercise profound influence on all subsequent scientific thought even into modern times. This was the “atomistic” school.

The type of thinking initiated by the Milesian school of pre-Socratic thinkers — Thales, Anaximander, and Anaximenes — in the sixth century B.C. was carried forward in many directions. One of the most remarkable outcomes of such

18 Milton K. Munitz, ed., *Theories of the Universe* (Glencoe, IL: The Free Press, 1957), p. 63–64. Munitz was Professor of Philosophy at New York University.

speculations, representing a culmination of their materialistic thought, was to be found in the atomist school. Originally worked out in its main features by Leucippus and Democritus in the fifth century B.C., the teachings of atomism were later adopted as a basis for the primarily ethical philosophy of Epicureanism. . . . It elaborates the conception of a universe whose order arises out of a blind interplay of atoms rather than as a product of deliberate design; of a universe boundless in spatial extent, infinite in its duration and containing innumerable worlds in various stages of development or decay. . . . It was the same conception, however, which once more came into the foreground of attention at the dawn of modern thought and has remained up to the present time an inspiration for those modes of scientific thinking that renounce any appeal to teleology in the interpretation of physical phenomena.¹⁹

Modern evolutionary materialists are not so modern after all. Their system is essentially the same as the pre-Socratic Greek cosmology of 2,500 years ago! The system continued through the Roman period, with one of its leading exponents being the Roman poet Lucretius. A typical excerpt from his philosophical writings follows:

Certainly the atoms did not post themselves purposefully in due order by an act of intelligence, nor did they stipulate what movements each should perform. As they have been rushing everlastingly throughout all space in their myriads, undergoing myriad changes under the disturbing impact of collisions, they have experienced every variety of movement and conjunction till they have fallen into the particular pattern by which this world of ours is constituted. This world has persisted many a long year, having once been set going in the appropriate motions. From these everything else follows.²⁰

The still earlier Greek philosophers, beginning apparently with Thales (640–546 B.C.), were also evolutionists and materialists. Thales' home was Miletus, and his followers are called the Milesian school, and also the Ionian school.

19 Milton K. Munitz, ed., *Theories of the Universe* (Glencoe, IL: The Free Press, 1957), p. 6.

20 Lucretius, *The Nature of the Universe*, trans. R. E. Latham, (New York, NY: Penguin Books, 1951), p. 58. Lucretius lived from 96 to 55 B.C.

The Milesian system pushed back to the very beginning of things the operation of processes as familiar and ordinary as a shower of rain. It made the formation of the world no longer a supernatural, but a natural event. Thanks to the Ionians, and to no one else, this has become the universal premise of all modern science.²¹

That concept of evolutionary development is not, of course, exactly that of modern Darwinism, but the essentials are there:

The order arose by differentiation out of a simple state of things, at first conceived as a single living substance, later by the pluralists, as a primitive confusion in which “all things,” now separate, “were together.”²²

Thales was influenced in his thinking especially by the Egyptians and the Phoenicians, as well as by the cosmogonic myths of the Greeks themselves, particularly as recorded by Hesiod. The scope of this study does not warrant a detailed tracing of the cosmogonies of all the ancient peoples — Persians, Syrians, Egyptians, Canaanites, and others. If that were done, however, it could be shown that all of them, in one way or another, were essentially evolutionists, with the one exception, of course, of the Hebrews. As one illustration, however, let us consider another great nation, in a completely different part of the world, also with a long history — namely, China.

In contrast to the Western world, the Far Eastern philosophers thought of creation in evolutionary terms. . . . The striking feature of the Chinese concept of cosmogony is the fact that creation was never associated with the design or activity of a supernatural being, but rather with the interaction of impersonal forces, the powers of which persist interminably.²³

Some of the Chinese speculations, in fact, go into amazing detail concerning the supposed sequences of organic evolution, proceeding organism by organism from the simplest plants upward through grubs, insects, birds, leopards, horses, and men:

21 F.M. Cornford, “Pattern of Ionian Cosmogony” in *Theories of the Universe*, ed. Milton K. Munitz, p. 21.

22 *Ibid.*, p. 22.

23 Ilza Veith, “Creation and Evolution in the Far East,” in *Issues in Evolution*, ed. Sol Tax (Chicago, IL: University of Chicago Press, 1960), p. 1–2.

Though completely fanciful, this ladder of nature is noteworthy because it was conceived more than two millennia before the Western world began to re-examine its biblical chronology. But beyond this, the above-quoted passage contains two highly important points: first, a belief in an inherent continuity of all creation and, second, a reference to the merging of one species into another — from primordial germ to man.²⁴

However, it is also significant that the very *oldest* Chinese traditions seem to focus on a high God who created all things. This belief was superseded early by the above evolutionary speculations, and eventually by the sophisticated pantheism of Taoism, Confucianism, and Buddhism.

The ancient cosmogonies of India also are evolutionary. All of these systems regard the earth as extremely old, perhaps infinite in age. Those modern writers who like to boast of the “discovery” that the earth is billions of years old instead of thousands, as a great achievement of modern science seem to be ignorant of the almost universal belief of the ancients in evolution and the great antiquity of the earth.

In the light of these facts, the common charge that Moses wrote Genesis in terms of special creation, rather than in those of the more sophisticated concept of evolution, as an accommodation to the naive culture of the Hebrews to whom he was writing, is itself obviously inexcusably naive! The only cosmogonies that Moses’ people could have encountered in the world of their day, apart from Genesis, were evolutionary cosmogonies. The concept of a special, recent creation of all things was a radical, new concept, and would have had to be plainly and definitely set forth in the clearest terms in order for them to grasp it!

Not only do evolutionary systems appear among all the ancient philosophies and religions, however. In spite of many differences in detail, it is well-known that the very religions themselves are all essentially the same. Whether in Greece, Rome, Egypt, Canaan, India, or anywhere else, the basic systems prove to be equivalent to each other. Each involves an array of gods and goddesses representing various aspects of nature and life, altogether comprising the great world-spirit which is essentially the personification of the universe itself. The gods and goddesses in each nation usually have exact counterparts in the pantheons of other nations,

24 Ilza Veith, “Creation and Evolution in the Far East,” in *Issues in Evolution*, ed. Sol Tax (Chicago, IL: University of Chicago Press, 1960), p. 7.

and the ritualistic systems, especially the “mysteries” imparted to their respective initiates, are likewise equivalent.

The modern notion is that these pagan gods and goddesses were simply imaginary creatures in naive myths and fairy tales. The fact is, however, that ancient people — as well as modern pagan worshippers, including animists — were far more sophisticated in their approach to the understanding of nature than we realize. As Abel says,

In general, myth conveys the impression of a story invented *ex nihilo*, a story describing the irascible and typically irresponsible actions of various divine malcontents. But these deities are not simply malevolent gods capriciously toying with mankind. They are actually personifications of Nature, and their activities, predictable and unpredictable, determine what life will be like on earth.²⁵

It is these assorted deities — personifying the sea, land, fire, feelings, loves and hatreds, and all the other various systems and forces of nature (which in turn are personified as the great Mother) — who produce and control plants and animals and people and their destinies. This polytheism is thus merely the popular face on the evolutionary pantheism that constitutes the common heritage of all nations, with the exception of those few who still believed in monotheism and the one personal God of all creation. Furthermore, their commonality — the same deities and activities, though with different names corresponding to their different languages — surely indicates that they all were derived originally from a common source.

The classic work of Alexander Hislop, *The Two Babylons*, has never been answered. In this work Hislop documents from an abundance of sources the primeval unity of the various pagan religions and traces their origin back to the first Babylon. He says:

These mysteries were long shrouded in darkness, but now the thick darkness begins to pass away. All who have paid the least attention to the literature of Greece, Egypt, Phoenicia, or Rome are aware of the place which the “Mysteries” occupy in these countries, and that, whatever circumstantial diversities there might be, in all essential respects these “Mysteries” in the different countries were the same. Now, as the language of Jeremiah (51:7) would indicate that Babylon was the primal source from which all these systems of idolatry flowed, so the

²⁵ Abel, *Ancient Views on Origin*, p. 15.

deductions of the most learned historians, on more historical grounds, have led to the same conclusion.²⁶

One need not agree with Hislop's argument that this ancient Babylonian system is now represented essentially by Roman Catholicism to appreciate his strong case that the various pagan religions had a common source in Babylon — or better, in the original Babel.

In any case, it is evident that the Babylonian cosmogony must be very ancient, and must have had profound influence on those of other ancient nations. In modern times, it has been rediscovered by archaeologists, and is known as *Enuma Elish*.²⁷ In the form now available, it is believed to have been written about 2600 B.C., and thus to have been written before Moses' time. Many people, therefore, have erroneously concluded that Moses borrowed his creation account from this source, but the truth is that the *Enuma Elish* represents at best a corrupted form of the true record that was handed down to Moses by the early patriarchs.

Actually, *Enuma Elish* is the Babylonian cosmogonical myth, and like all the others, it is an evolutionary system. From such as these the later philosophers, like Thales, sought to extract the "true" materialistic history of the earth.

One evidence of the influence of myth upon these earliest instances of "scientific" thought is to be found in the interest in formulating a complete cosmogony which would show how from some primordial state an ordered world arose and underwent successive differentiations of an astronomic, geographic, and meteorologic kind, culminating ultimately, in the mergeance of living things and human society.²⁸

All such myths began with matter in some form already in existence, and then the forces of nature (or the gods who personify those natural forces) are described as operating upon this primeval matter in such ways as to bring a cosmos out of the chaos. The early philosophers then placed the popular polytheism in a scientific framework, proposing the develop-

26 Alexander Hislop, *The Two Babylons*, Amer. ed. (New York, NY: Loizeaux Brothers, 1950), p. 12. This book was originally published in Edinburgh in 1858 and has gone through numerous editions and printings.

27 Alexander Heidel, *The Babylonian Genesis* (Chicago, IL: University of Chicago Press, 1959).

28 Milton K. Munitz, *Space, Time, and Creation* (Glencoe, IL: The Free Press, 1957), p. 8–9.

ment of things from some primordial stuff, such as fire or atoms, or, most commonly, water.

Specifically, *Enuma Elish* assumes that all things have evolved out of water.

This description presents the earliest stage of the universe as one of watery chaos. The chaos consisted of three intermingled elements: Apsu, who represents the sweet waters; Ti'amat, who represents the sea; and Mumsu, who cannot as yet be identified with certainty but may represent cloud banks and mist. These three types of water were mingled in a large undefined mass. . . . Then, in the midst of this watery chaos, two gods came into existence — Lahau and Lahamu.²⁹

Then the epic goes on to describe how other gods were generated and then engaged in various activities, including fighting and killing one another. Eventually the god Marduk gained control of the heavenly host and thence proceeded to the formation of the earth and stars and man, the latter actually from the blood of one of the slain gods.

The complicated battles of the gods and goddesses seem to portray the struggling forces of nature as they labor to bring forth an orderly world. Or, perhaps, they may rather represent actual warfare in the heavens, such as the Bible describes, between Satan and his angels and Michael and his angels. Or possibly both.

In any case, such tales are certainly infinitely inferior to the true record of creation as given in the first chapter of Genesis. The idea that Genesis could have been derived from such mythology as this is incredible.

We have thus shown that the evolutionary philosophy is not modern at all, but, rather, traces back through all the history of mankind, right back to Babylon — not the Babylon of Nebuchadnezzar (though it was prominent there), but to the original Babel founded by Nimrod (Gen. 10:8–10). Furthermore, the evolutionary system is foundational to the system of pantheistic polytheism which constituted the universal religion of the ancients, and which also was derived from Babel.

Moreover, this system invariably is identified in some way with astrology, and all the various divinities are associated with their own particular stars or planets. To the pagans, these heavenly beings were not considered as mere religious ideals, but as living spirits, capable of

29 Thorkild Jacobsen, "Enuma Elish—the Babylonian Genesis," in *Theories of the Universe*, ed. Milton K. Munitz, p. 9.

communicating directly with men through oracles or seers or mediums. Pantheism, polytheism, astrology, idolatry, mysteries, spiritism, materialism — this whole great complex of belief and practice, superficially diverse, but fundamentally one — constitutes the gigantic rebellion of mankind against the true God of creation. Always, whatever the outward appearance, the underlying faith is in eternal matter, in a self-contained cosmos evolving upward out of chaos toward future perfection.

Though in some cases, particularly isolated tribes, the people seem to have retained some kind of dim awareness of a great high God, far removed in time and space from their personal lives, their practical interests have from primeval times almost invariably been centered in the multiple divinities connected with their own immediate environments. Such identification of ultimate reality with finite natural objects is nothing but evolution. Matter in some form, not God, is their original and eternal cause of all things.

The connection of the pantheon of gods and goddesses with the stars, planets, and constellations in the system known as astrology is significant. Astrology, with its signs of the Zodiac, seems to have been the common heritage of all nations and their ancient religious systems. It is also prominent in the modern “New Age” revival of ancient pantheism. The stars were believed to be essentially identical with the various deities that they represented (Mars, Venus, etc.) and thus to exert much control over human lives. Abel expressed this as follows:

For instance, when the Babylonian priests turned their attention to natural phenomena such as the stars, it was for the purpose of knowing better the will of the gods whose actions were believed to be intimately linked with the movements of these heavenly bodies.³⁰

In common with all other features of paganism, whether ancient or modern, astrology is an evolutionary system, rejecting the concept of the transcendent God who created the stars, as well as the fallen angels (who came eventually to be worshipped as deities) who presumably inhabit their respective stars and planets. All of these, as well as all other beings and systems, were believed to have evolved out of the primeval waters. This belief seems to have originated in Babel (though it was also prominent in ancient Egypt) and eventually was incorporated by Thales and his Milesian followers into the Greek cosmology.

30 Abel, *Ancient Views on Origin*, p. 23.

In the end, observation and introspection caused him (Thales) to conclude that all the variations in Nature could in fact be accounted for in terms of a single substance — water.³¹

In view of the apparently common origin of all ancient religions, it also seems significant that most of their cosmogonies begin with the world already in existence, but consisting primarily of pervasive waters everywhere. The significant point is that the Genesis cosmogony, on the other hand, does *not* begin with water, but with God. Then the first act of creation by God was to speak the space/mass/time universe into being — not in completed form (*that* was done in six days, as a pattern for man's future work week), but in a form that initially *did* consist primarily of pervasive waters.

This fascinating situation provides the clue from which we may be able finally to trace out the ultimate source of the great global age-long deception of evolution.

The Ultimate Origin of Evolutionism

The origin of evolution as a religious philosophy (and that, of course, is all that it can ever be) is thus locked together with the origin of paganism, which in the post-diluvian world was undoubtedly at Babel. This origin is also intimated by Scripture, when it speaks of "Mystery, Babylon the Great, the mother of harlots and abominations of the earth" (Rev. 17:5). Since Nimrod was the founder and first ruler of Babylon, it seems reasonable to propose that he was responsible for the introduction of this entire religious system into the life of mankind.

To the modern skeptic, of course, Nimrod is merely a nonexistent legendary hero like all the other names recorded in the early chapters of Genesis. Such skeptics should at least realize, however, that the literature of antiquity frequently refers to Nimrod in one way or another. There were many people in ancient times, in addition to the writer of Genesis, who regarded him as real.

Numerous ancient historians recognize Nimrod and his exploits, and various sites in the Babylonian-Nineveh region are associated by the Arabs with his name. It is quite possible that the chief god of the Babylonians (Marduk, or Merodach) really represents the same Nimrod, deified after his death.

Obviously, however, when we attempt to decipher history of this degree of antiquity, we have little to go on. This is the period in which fact and legend are almost indistinguishable. Although a great deal of archaeological excavation has been done in the Tigris-Euphrates valleys, the

31 Ibid., p. 24.

monuments are difficult to translate, and only a small fraction even of the recovered materials has really been read. Much still remains to be excavated, and, of course, the far greater part has long since been destroyed by the ravages of time.

We do, of course, have the record of Genesis 10 and 11. Though these chapters are tantalizingly brief, we can have confidence that the information they give is true. To the skeptic, we can say at least two things — no one has disproved the validity of these verses, and he has as yet nothing better to offer.

In this section, as we seek to understand the ultimate source of the evolutionary system, speculation is admittedly necessary. But at least it is speculation guided by the information given in Scripture, as well as by the historical data that we have been accumulating.

We assume, therefore, that the Babylonian mysteries were originally established by Nimrod and his followers at Babel. They have somehow since been transmitted throughout the world and down through the centuries, corrupting all nations with their materialistic glorification of the “host of heaven,” changing the “glory of the uncorruptible God into an image made like to corruptible man, and to birds, and fourfooted beasts, and creeping things” (Rom. 1:23). Because they “did not like to retain God in their knowledge” (Rom. 1:28), they proceeded to change “the truth of God into a lie, and worshipped and served the creature more than the Creator” (Rom. 1:25).

The remarkable similarities and antiquities of the zodiacal constellations and the astrological systems that have come down from all the early nations, provide strong evidence of the primeval unity of heathendom. It therefore is a reasonable deduction, even though hardly capable of proof, that the entire monstrous complex was revealed to Nimrod at Babel by demonic influences, perhaps by Satan himself.

It is significant that the phrase “the host of heaven” is applied in Scripture both to the stars and to angels. Similarly, the worship of the sun, moon, and stars, as well as the mythological deities, and the graven images that represent them, is also frequently identified in Scripture with the worship of angels, and especially with the fallen angels and the demonic hosts who are following Lucifer (Isa. 14:12–14; Rev. 12:4) in his attempt to replace God as king of the universe.

In common with all the other great temple-towers of antiquity, it is likely that the original Tower of Babel (Gen. 11:4) was built, not to “reach unto heaven” in a literal sense (Nimrod was no naive character in a fairy tale to attempt such a project as that) but rather with a “top unto heaven”

(the words “may reach” are not in the original). That is, its top was probably a great temple shrine, emblazoned with the zodiacal signs representing the host of heaven, Satan and his “principalities [and] powers, rulers of the darkness of this world” (Eph. 6:12).

These evil spirits perhaps met with Nimrod and his priests there, to plan their long-range strategy against God and His redemptive purposes for the post-deluge world. This included especially the development of a non-theistic cosmology, one which could explain the origin and meaning of the universe and man without acknowledging the true God of creation. Denial of God’s power and sovereignty in creation is, of course, foundational in the rejection of His authority in every other sphere.

The solid evidence for the above sequence of events is admittedly tenuous.³² As a hypothesis, however, it does harmonize with the biblical record and with the known facts of the history of religions, whereas it is difficult to suggest any other hypothesis that does.

If something like this really happened, early in post-diluvian history, then Satan himself is the originator of the concept of evolution. In fact, the Bible does say that he is the one “which deceiveth the whole world” (Rev. 12:9) and that he “hath blinded the minds of them which believe not” (2 Cor. 4:4). Such statements as these must apply especially to the evolutionary cosmology, which indeed is the world view with which the whole world has been deceived.

One question remains. Assuming Satan to be the real source of the evolutionary concept, how did it originate in his mind? He originally was “full of wisdom, and perfect in beauty . . . in the day that thou wast created” (Ezek. 28:12–13). Surely, he knew very well that he, as well as all other angels and everything else, had been created by God, not evolved by natural processes. Knowing this, he could never have the slightest hope of succeeding in the cosmic rebellion that he has been promoting for so many millennia.

A possible answer to this mystery may be that Satan, the father of lies, has not only deceived the whole world and the angelic hosts who followed him, but that he has even deceived himself! The only way he could really *know* about creation (just as the only way *we* can know about creation) was for God to tell him! But “thine heart was lifted up because of thy beauty, thou hast corrupted thy wisdom by reason of thy brightness” (Ezek. 28:17).

32 The sequence of historical events outlined in this chapter has been discussed and documented more thoroughly in the book, *The Long War Against God* by Henry M. Morris (Grand Rapids: Baker Book House, 1989).

The sin of pride and unbelief, the twin source of all other sins, resulted in “the condemnation of the devil” (1 Tim. 3:6). Satan refused to believe and accept the Word of God concerning his own creation and place in God’s economy. Perhaps resentment at the creation of man in God’s image, with the marvelous ability to multiply his own kind (which angels cannot do) and the commissioning of man as God’s vice-regent over the earth (infinitely more beautiful and complex than all the stars of heaven) contributed to the nurturing of this unbelieving pride in Satan. He therefore deceived himself into supposing that all things, including himself and including God, had been evolved by natural processes out of the primordial stuff of the universe, and that therefore he himself might hope to become God.

The only evidence he had for creation was God’s Word, even though that was eminently reasonable. His first conscious awareness after God created all the angels, evidently on day one of creation week (note Ps. 104:1–5) prior to laying “the foundations of the earth” on day three, was that of the primeval waters (Gen. 1:2). His only alternative to believing that God is eternal and Creator of all things was to assume that both God and the angels also had “evolved” out of the waters! God may have appeared before him, but they were of the same essence, and therefore equal.

Satan therefore said in his self-delusion, “I will be like the most High” (Isa. 14:14) and God “cast [him] to the ground [same word as ‘earth’]” (Ezek. 28:17). He then brought about man’s fall with the same deception (“ye shall be as gods” — Gen. 3:5), and the long tragic history of the outworking of human unbelief as centered in the grand satanic delusion of evolution has been the result.

Chapter 3

The Corrupt Fruits of Evolutionism

It is not surprising that a world view which denies God and His Word and which is utterly devoid of scientific truth or value should generate ungodly behavior by its followers. Volume 1 of this Trilogy has demonstrated that evolution is completely contrary to the Bible and to the Christian faith, and Volume 2 has documented its unscientific character. Then the first two chapters of this third volume have shown the amazing fact that, despite its unscientific and anti-biblical nature, evolutionism has come to dominate every academic discipline in the schools of the world and that, indeed, it has done so throughout most of human history, in one form or another.

In the remaining chapters of this book, we want to show that practically all the harmful practices and deadly philosophies that plague mankind have their roots and pseudo-rationale in evolutionism. A good way to start is with the ancient pagan notion of the “Great Chain of Being,” and its 19th-century stepchild, the evolutionists’ famous “recapitulation theory.”

The Tragic Heritage of the Recapitulation Theory

The origin of the “Great Chain of Being” concept is lost in antiquity, but Plato discussed it, as did Plotinus and other neo-Platonist philosophers. It had significant impact on the medieval church and was prominent in the writings of many Renaissance scientists and philosophers. The essential idea was that emanations of the cosmos had produced an unbroken chain of entities in the universe, proceeding from the cosmic source of all being, down through spirit beings, to human beings (higher races to lower), to animals (again higher to lower), to

plants, to non-organic systems, to basic elements. Even though many links in the unbroken chain are still unknown, they must exist somewhere, so the concept goes.

This notion that there was a continuous chain from complex to simple, or from simple to complex, was also applied by early scientists. They assumed that there must be a continuous chain of structural forms in the animal world, as well as a continuous chain of forms of life developing over the ages. This theory led to the “science” of comparative morphology, in the first case, and to the assumed increasing complexity of fossil forms in the geologic column (an assumption made many years before any significant numbers of fossils had actually been excavated) in the second case. Both systems (similarities of anatomy and the fossil record) were then appropriated by early evolutionists (well before Charles Darwin’s time) as evidence of evolution. Of course, as discussed in Volume 2 of the Trilogy, the actual *data* on which both systems were based provide much better evidence of creation. The *gaps* in both cases are far more significant than the similarities and continuities.

A third application of the “Great Chain,” as developed especially by German and French naturalists in the century before Darwin, was the assumption that the development of each animal or human embryo in the womb also proceeded from simple to complex through a continuous chain. It was easy, then, for the pre-Darwin evolutionists to associate this development with the assumed development of different forms of life during the geological ages, making the one analogous to and mutually supportive of the other.

Ideas have consequences, and false ideas usually generate bitter consequences. One of the premier examples of this principle thus became the infamous “recapitulation theory,” developed by such philosophers as Goethe and Robert Chambers, and then popularized in Darwin’s day by Ernst Haeckel, the German atheist. Called by Haeckel the “biogenetic law,” this idea was spread widely by his euphonious slogan, “ontogeny recapitulates phylogeny,” meaning that embryonic growth of the fetus in the womb rapidly recapitulates (repeats) the entire evolutionary history of the species. This bizarre notion has been cited by credulous evolutionists for over 150 years as one of the main “proofs” of evolution. Darwin, himself, made great use of it in his *Origin of Species* and *Descent of Man*.

Nevertheless, recapitulationism is completely false, and most competent evolutionists today know this. Two leading neo-Darwinists have admitted the error thus:

Haeckel misstated the evolutionary principle involved. It is now firmly established that ontogeny does *not* repeat phylogeny.¹

More recently, Dr. Keith Thompson, professor of biology at Yale, said:

Surely the biogenetic law is as dead as a doornail. It was finally exorcised from biology textbooks in the fifties. As a topic of serious theoretical inquiry, it was extinct in the twenties.²

In spite of its specious character, this notion captivated the minds of evolutionists, is still believed by millions of their followers even today, and still finds its way into high school textbooks. Four of the very important, but very bitter fruits produced by the corrupt tree of recapitulationism are discussed briefly below.

1. The Standard Geologic Column

The fossil record has long been considered the definitive evidence of evolution, with simple life forms supposedly preserved in ancient rocks, and complex forms presumably in younger rocks. The dating of the rocks, however, is based on the fossils they contain — not on their vertical position in the sedimentary sequences. Leading evolutionists acknowledge this to be circular reasoning.

The charge that the construction of the geologic column involves circularity has a certain amount of validity.³

And this poses something of a problem: If we date the rocks by their fossils, how can we then turn around and talk about patterns of evolutionary change through time in the fossil record?⁴

Thus, the key “proof” of evolution is based on the *assumption* of evolution. In fact, pre-Darwinian theistic evolutionists and progressive

1 GG. Simpson and W. Beck, *An Introduction to Biology* (New York, NY: Harcourt Brace and World, 1965), p. 241.

2 Keith S. Thompson, “Ontogeny and Phylogeny Recapitulated,” *American Scientist*, vol. 76 (May/June, 1988), p. 273.

3 David M. Raup, “Geology and Creation,” *Bulletin of the Field Museum of Natural History*, vol. 54 (March 1983), p. 21.

4 Niles Eldredge, *Time Frames: The Rethinking of Darwinian Evolution and the Theory of Punctuated Equilibrium* (New York, NY: Simon and Schuster, 1985), p. 52.

creationists had already worked out the desired order of the fossils before any significant number of them had even been discovered, so that the geologic column was essentially ready-made as an evidence for evolution when Darwin proposed his theory. They had assumed that there was an innate principle operating in the cosmos and in living organisms that impelled them to proceed upward in complexity, and that this evolutionary order must be the same everywhere — in embryology, morphology, paleontology, and even psychology. It was natural, therefore, for these theorists to use embryological studies as a basis for assigning order to the fossils.

In Down's day, the theory of recapitulation embodied a biologist's best guide for the organization of life into sequences of higher and lower forms.⁵

Another major factor keeping some sort of recapitulation alive was the need of comparative morphologists and especially paleontologists for a solid theoretical foundation for homology. They had long since come to rely on comparative ontogenetic information as a base.⁶

Although a number of other factors contributed significantly to the development of the standard stratigraphical column (e.g., the rock sequences in western Europe), embryological studies were perhaps most important of all. This standard geological column is found only in textbooks, however, and all the supposed transitional forms are still missing in the rocks themselves.

2. Freudian Psychoanalysis

Another deadly fruit of the recapitulation idea was the psychological system developed by Sigmund Freud. Although much of his system is now rejected by modern psychologists and psychiatrists, there is no question that all of them (including many Christians) have been profoundly influenced by Darwinism and the whole concept of man's presumed animal ancestry. Recent discovery of a hitherto unpublished manuscript of Freud reveals how strongly he relied on recapitulationism.

In a 1915 paper Freud demonstrates his preoccupation with evolution. Immersed in the theories of Darwin, and of Lamarck, who believed acquired traits could be inherited,

⁵ Stephen J. Gould, "Dr. Down's Syndrome," *Natural History*, vol. 89 (April 1980), p. 144.

⁶ Thompson, "Ontogeny and Phylogeny Recapitulated," p. 274.

Freud concluded that mental disorders were the vestiges of behavior that had been appropriate in earlier stages of evolution.⁷

The evolutionary idea that Freud relied on most heavily in the manuscript is the maxim that “ontogeny recapitulates phylogeny,” that is, that the development of the individual recapitulates the evolution of the entire species.⁸

All the anti-Christian impact of Freud’s atheistic psychological system, leading even to the modern sexual revolution, so-called, can thus be traced largely back to this recapitulation notion.

3. Modern Racism

Feelings of tribalism, nationalism, and racism have existed ever since Babel, but racism did not reach its most intense and virulent level until it received a pseudo-scientific sanction from Darwinism. This new form of evolutionism, popularized in western Europe and America during the 19th century, with its emphasis on “survival of the fittest,” lent itself naturally to the idea of competition between races, with the supposedly more highly evolved races eliminating the “savage races,” as Darwin called them,⁹ in the “struggle for existence.”

Social Darwinism, with its imperialist and racist emphases, became exceedingly strong in the 19th and early 20th centuries, and, even though it went into partial eclipse after World War II, its tragic aftereffects are with us still. Racism reached its zenith under Hitler in Nazi Germany, and the “biogenetic law” of Ernst Haeckel was largely responsible.

Recapitulation was Haeckel’s favorite argument . . . Haeckel and his colleagues also invoked recapitulation to affirm the racial superiority of northern European whites. . . . Herbert Spencer wrote that “the intellectual traits of the uncivilized . . . are traits recurring in the children of the civilized.” Carl Vogt said it more strongly in 1864: “The grown up Negro partakes, as regards his intellectual faculties, of the nature of the child. . . .”¹⁰

7 Daniel Goleman, “Lost Paper Shows Freud’s Effort to Link Analysis and Evolution,” *New York Times* (February 10, 1987), p. 19.

8 *Ibid.*, p. 22.

9 Charles Darwin, *The Descent of Man*, 2nd ed. (New York, NY: A. L. Burt, Co., 1974), p. 178.

10 Stephen Jay Gould, “Racism and Recapitulation,” chap. 27 in *Ever Since Darwin* (New York, NY: W. W. Norton and Co., 1977), p. 217.

[Haeckel] became one of Germany's major ideologists for racism, nationalism, and imperialism.¹¹

In essence, Haeckel and his fellow social Darwinists advanced the ideas that were to become the core assumptions of national socialism.¹²

Lest anyone misunderstand, although all the above authorities are evolutionists, they do not believe in either recapitulationism or racism. The quotations are brief, but they do not misrepresent their authors. Much more documentation to the same effect could be provided if necessary.

4. *The Plague of Abortionism*

The most recent application of the recapitulation theory has been as a pseudo-scientific justification for the terrible holocaust of abortionism that has been sweeping the world in recent years. Although there may be many personal reasons that women have abortions and that doctors perform them, the only *scientific* or *religious* justification that can be given for abortion is that the fetus is not yet really a human being. If the embryo is truly human, with human life and an eternal soul, then abortion is obviously cruel, premeditated murder! Therefore, abortionists must deny that the fetus is human. How much easier to destroy an embryo while it is still in a fish stage, or a reptile stage, than to acknowledge it as fully human right from the start.

But the only quasi-scientific rationale for such a pronouncement must be based on recapitulationism. As a widely syndicated columnist says, referring to an article by evolutionary feminist Ellen Goodman:

I think that what she imagines is that the human embryo undergoes something like the whole process of evolution, as in the old adage that "ontogeny recapitulates phylogeny."¹³

This type of reasoning, of course, is specious, at best, and so is that which justifies racism, or Freudianism, or even the standard evolutionary interpretation of the fossil record. As we have shown, all these concepts

11 Daniel Gasman, *The Scientific Origins of National Socialism: Social Darwinism in Ernst Haeckel and the German Monist League* (New York, NY: American Elsevier, 1971), p. xvii.

12 George J. Stein, "Biological Science and the Roots of Nazism," *American Scientist*, vol. 76 (January/February 1988), p. 56.

13 Joseph Sobran, "The Averted Gaze: Liberalism and Fetal Pain," *Human Life Review* (Spring 1984), p. 6.

have been largely based on the discredited quasi-scientific notion of the 19th century that “ontogeny recapitulates phylogeny.” There are still other erroneous and harmful ideas that have sprouted from recapitulationism. For example, much of modern criminology has developed out of this same recapitulationist concept.

A whole school of “criminal anthropology” . . . branded white wrong-doers as genetically retarded. . . . Born criminals are not simply deranged or diseased; they are, literally throw-backs to a previous evolutionary stage.¹⁴

The summary above gives some insight into the devastating social effects of evolutionism in general and the recapitulation theory in particular. We need not discuss the geological column further here, since this subject is treated at some length in Volume 2.

The subject of racism is treated more fully in chapter 4 of this book, along with its connections with Nazism, social Darwinism, and Communism — all of which also base their pseudo-scientific justification on evolutionism.

While dealing in this chapter with the more personal impact of evolutionism on human beings, however, we should explore a little more deeply into the subjects of abortionism, the “sexual revolution” as generated by Freudian “psychobabble,” and anti-social behavior in general.

The “Free Choice” of Abortion

The modern euphemism for abortion has become the noble-sounding phrase, “a woman’s right to choose” — referring, of course, to her supposed right to abort her baby if she wants to do so. Most professing Christians, especially those who take the Bible literally as the authoritative Word of God, believe that abortion is actually murder of an unborn child, and so they must oppose it. The advocates of “freedom-of-choice,” naturally, do not like to think of abortion as murder, and so insist that the “fetus” is not really human until it is born, or at least until about the third trimester of pregnancy. This, however, is quite wrong.

Unfortunately, a terrible holocaust of abortionism has been unleashed on our nation in recent years as a result of decisions by a humanist-dominated court system. What once was considered a serious crime is now considered a “human right” — that is, the so-called right of the mother to control her own body. Little, if any, consideration is given to

14 Gould, *Ever Since Darwin*, p. 218, 223. Again, to prevent misunderstanding, Gould is merely citing — not approving — this idea.

the rights of the unborn child, for the simple reason that the fetus is now regarded as “not fully human.” The basis of this inhuman decision is simply the evolutionary view of man, along with the “recapitulation theory,” as briefly discussed above.

So the abortion debate has its roots in two alternative ways of imagining the unborn. Our civilization, until recently, agreed in imagining the unborn child on the pattern of the incarnation, which maximizes his dignity; but many people now imagine him on the pattern of evolution, as popularly understood, which minimizes his dignity.¹⁵

This “pattern of evolution” as popularly understood is nothing else than the hoary evolutionary belief that “ontogeny recapitulates phylogeny.” As Sobran says:

The adage has been discredited, of course, but this does not mean it has lost its power over the imagination of many modern people. They still suppose that the human fetus is in the early stages of development a “lower” form of life, and this is probably what they mean when they say it isn’t “fully human.” It begins as something virtually amoebic, proceeds to become something like a shrimp, then a puppy, then an ape, and finally a human.¹⁶

If the embryo is merely recapitulating the animal stages of its evolutionary ancestry, then it is all right to terminate it before it becomes human, so the reasoning goes. The fact is, however, that this bizarre and self-serving notion has long since been disproved. As noted previously, leading evolutionist S.J. Gould admitted the following, while commenting on the recapitulation theory:

In Down’s day, the theory of recapitulation embodied a biologist’s best guide for the organization of life into sequences of higher and lower forms. (Both the theory and “ladder approach” to classification that it encouraged are, or should be, defunct today).¹⁷

This most bizarre of the supposed evidences for organic evolution was popularized in the 19th century by the atheistic biologist Ernst Haeckel, who also headed Germany’s infamous Monist League. The

15 Joseph Sobran, “The Averted Gaze,” p. 6. Sobran is a nationally syndicated columnist.

16 Ibid.

17 Gould, “Dr. Down’s Syndrome,” p. 144.

human embryo was said to begin life as a protozoan, then go through a fish stage (with gill slits) and a monkey stage (with a tail) before finally becoming a human being.

This absurd theory has long since been repudiated by competent biologists, even though it still appears in some textbooks and anti-creationist polemics. Any diminishing hope that it might be true should have been demolished by modern fetoscopy, which “makes it possible to observe directly the unborn child through a tiny telescope inserted through the uterine wall.” Dr. Sabine Schwabenthan concludes:

We now know, for instance, that man, in his prenatal stages, does not go through the complete evolution of life — from a primitive single cell to a fish-like water creature to man. Today it is known that every step in the fetal development process is specifically human.¹⁸

For a false notion, however, the recapitulation theory has had profound and tragic consequences. During the early days of paleontology, “progressive creationist” geologists such as Agassiz and D’Orbigny, following Cuvier, frequently used it as a framework for arranging their fossils in what they assumed should be a chronological sequence, on their simple assumption that God’s successive creations should conform to their arrangement for classifying animals, and also to the embryological development of each animal.

The paleontological series so constructed naturally later seemed to give a superficial appearance of evolution, even though it included no real “transitional” forms, and even though it had little relation to any vertical successions of sedimentary strata. It was by this questionable device that the “fossil record,” so constructed, later began to be cited as the main proof of evolution.

Also, as Harvard’s Stephen Jay Gould has pointed out:

Recapitulation provided a convenient focus for the pervasive racism of white scientists; they looked to the activities of their own children for comparison with normal, adult behavior in lower races.¹⁹

According to Gould, the term “mongoloid” was first applied to mentally defective people because it was then commonly believed that the Mongoloid race had not yet evolved to the status of the Caucasian race.

18 Sabine Schwabenthan, “Life Before Birth,” *Parents* (October 1979), p. 50.

19 Gould, “Dr. Down’s Syndrome,” p. 144.

Similarly, Henry Fairfield Osborn, one of the leading American paleontologists of the first half of the 20th century, argued thus:

The Negroid stock is even more ancient than the Caucasian and Mongolian. . . . The standard of intelligence of the average adult Negro is similar to that of the eleven-year-old youth of the species *Homo sapiens*.²⁰

Osborn was director of the American Museum of Natural History at the time. As noted above, Haeckel (and his disciple Adolph Hitler) used the same false assumption of recapitulationsim to justify the myth of the Aryan super race, destined to subjugate or obliterate other races!

But all these tragic results of this false theory are dwarfed by the painful murders of millions of unborn children. Since 1973 over 35 million babies have been murdered by abortion, more than five times the number of Jews slain by the Nazis under Hitler. The only possible “scientific” rationalization for these atrocities is the standard argument that the unborn fetus is not yet really a human being at all, a widespread belief that can be based only on the evolutionary philosophy in general and this same old discredited recapitulation theory in particular. After all, it is not considered murder to kill mere animals.

Ideas do have consequences, and false ideas can have tragic and lethal consequences. The slogan “ontogeny recapitulates phylogeny” is not only a curious and discredited slogan of the past. It is also the root of a tree bearing deadly fruit in the present.

Though it may still surprise some, there are few things more certain . . . than that the unborn are human beings. It is a biological and scientific fact that human life begins at fertilization, when the sperm cell of the father penetrates the egg cell of the mother. That unique genetic passage, something that each of us once was, contains everything that a person will become — the color of his eyes, the size of his feet, even whether or not he or she will contract diabetes at age fifty.

Thanks to the wonders of modern technology, we are able to study the unborn child from the earliest moments of its existence. We know that its heart begins to beat eighteen days after fertilization, that brain waves can be recorded by the

20 Henry Fairfield Osborn, “The Evolution of Human Races,” *Natural History* (January/February 1926), reprinted in *Natural History* (April 1980), p. 129.

fortieth day, and that all body systems are present at eight weeks and are working by the eleventh week.²¹

The Bible also teaches that each human conceptus is a true human being, with an eternal soul, right from the moment of conception. The only pseudo-scientific rationale for teaching otherwise is the long-discredited recapitulation theory. The embryo does *not* go through the assumed evolutionary stages of its ancestors, for there were never any such evolutionary stages anyhow. It is never an amoeba, never a fish with gill slits, never a monkey with a tail, never anything but a human being! Abortionism is nothing but an evil fruit of the evolutionary tree.

Evolutionary Psychology and the Sexual Revolution

Although sexual immorality has been a problem in every age and every culture, it has always, at least in Christian societies, been recognized as wrong. In America, for example, there have been laws against adultery, abortion, pornography, and homosexuality, as well as incest, bestiality, and other sexual crimes. Pre-marital chastity and marital fidelity have been the standard (though not always maintained) in the past, but nowadays these virtues are considered by many people to be passé — in fact, almost an occasion for ridicule.

No doubt, many contributing factors have brought about this wholesale change in our sexual mores, but a major factor undoubtedly has been the explosive growth of the psychological and counseling professions. Practitioners in these fields have — ever since Freud in particular — by and large promoted the idea that most human psychological problems are caused by society's sexual inhibitions. Therefore, such inhibitions are considered harmful and should be removed. Since sexual freedom — even promiscuity — is normal behavior among most animals, and since we are merely higher animals, this should be our norm also, many would argue.

Although many of the teachings of Sigmund Freud have been challenged by present-day psychologists and psychiatrists, this animalistic idea is still their basic premise, and is taught in almost all the educational programs preparing men and women for these professions. The explosive proliferation of “counselors” in the current generation — even in seminaries and churches — has been a remarkable sign of the times. And, once again, evolutionism is the root of it all.

Sigmund Freud is often listed together with Charles Darwin and Karl Marx as the three men whose teachings have had the greatest impact on

21 James J. Drimmey, “Abortion: the Other Holocaust,” *The New American*, vol. 2, January 20, 1986), p. 22.

the modern world. Furthermore, both Marx and Freud acknowledged their indebtedness to Darwin. The role of Marx is discussed in the next chapter, but Freud is even more an intellectual child of Darwin than Marx. Freud, in turn, is a sort of grandfather of the modern sexual revolution, basing many of his libidinous teachings on the recapitulation theory as advocated by Darwin and then popularized, on the continent especially, by Ernst Haeckel — Darwin's European "bulldog" — in Germany.

Evidently influenced by Haeckel, Freud believed that each person's history from fetus to adult recapitulates in brief the entire development of the human race. Both libido and ego, Freud argued, "are at bottom heritages, abbreviated recapitulations of the development which all mankind has passed through from its primeval days." . . . Freud thought that individual libidinal development recapitulates stages of human civilization. He believed that he could reconstruct human prehistory from studying children, as well as from observing neurotics.²²

Like Darwin and Marx, Freud was almost obsessed with hostility toward Christianity and the Bible, especially their moral teachings. A modern conservative scholar, Dr. Paul Vitz, has recently published an important analysis of this aspect of Freud's life and thought in his book *Sigmund Freud's Christian Unconscious*. A reviewer of the Vitz book comments as follows:

[Vitz] develops the claim that Freud had a strong attraction to Christianity. A corollary emphasis treats of Freud's unconscious hostility toward the Faith, which, as Vitz details, was a consequence of a curious preoccupation with the Devil, Damnation and the Anti-Christ.²³

It is curious that both Darwin and Marx had made a profession of faith in Christ as young men, but later turned bitterly against this youthful profession. What was once an "attraction to Christianity"

22 Martin Schatzman, "Freud's Debt to Darwin," review of *Darwin's Influence on Freud: A Tale of Two Sciences*, by Lucille B. Ritvo (New Haven, CT: Yale University Press, 1990), in *New Scientist*, vol. 129, (February 9, 1991), p. 62.

23 G.A. Cevasco, "Freud versus God," review of *Sigmund Freud's Christian Unconscious*, by Paul C. Vitz (New York, NY: Guilford Press, 1988), in *Intercollegiate Review*, vol. 24 (Fall 1988), p. 39.

turned to hatred when they resisted the moral implications, and they then tried to justify this reaction by appealing to “science.” In Freud’s case, as in that of Marx, this reaction became exceedingly bitter.

At every point, Vitz turns introspective eyes back onto Freud in order to expose the psychological motives for his rejection of God. Vitz even questions if Freud made a Faustian pact with the devil.²⁴

What was true of Freud became true of multitudes of his followers in succeeding generations, at least in their total rejection of the Christian faith and biblical moral standards. They assumed, erroneously, that Freud had disproved the validity of Christianity, especially in view of the “science” of evolution.

That Freud disproved religion, Vitz makes clear, is an overstated and oversimplified judgment bandied about by superficially educated and tragically uninformed individuals.²⁵

Nevertheless, his successors in the fields of psychology and psychiatry have, with few exceptions, followed him in building their own systems on evolutionism and the repudiation of biblical morality. A typical example is the clinical professor of psychiatry at McMaster University, who has proclaimed:

Christian doctrine, the existential soother par excellence, is incompatible with the principles of sound mental health.²⁶

It is not only the psychologists, but also practically all the social scientists (cultural anthropologists, sociologists, etc.) who hold such views today. The editor of the *Anthropology and Humanism Quarterly* is a strong critic of what he considers fundamentalist morality.

The doctrine of creationism and the attendant values involving rigid adherence to moral purity are impervious to arguments of reason.²⁷

He does at least recognize that creationism and moral purity are directly related. Evolutionism, with its premise that men and women are

²⁴ Ibid., p. 40.

²⁵ Ibid.

²⁶ Wendell W. Walters, “Christianity and Mental Health,” *The Humanist*, vol. 47 (November/December 1987), p. 5.

²⁷ Bruce T. Grindal, “Creationism, Sexual Purity, and the Religious Right,” *The Humanist*, vol. 43 (March/April 1983), p. 19.

merely evolved animals, provides the perfect pseudo-scientific rationale for those who would do away with such scripturally based restraints.

All of these evil conclusions are implicit in the basic tenets of evolutionary humanism, which is the (unofficial but nevertheless quite real) established religion of our public educational institutions and of most of the major private schools and colleges of our country. It is also the basic premise of almost all practicing psychologists — except for those few who specifically found their counsel on biblical teachings and principles.

When the 15 so-called “Tenets of Humanism” were first developed in 1933, largely through the influence of the famous philosopher/psychologist/educator John Dewey, and published as the “Humanist Manifesto,” it was significant that the first 2 “Tenets” constituted a statement of faith in the evolutionary origin of the universe and of man, respectively.

The second “Humanist Manifesto,” published in 1973, was built on the first and updated to the standards of the “enlightened” sixties and seventies. It dealt at some length with 17 spheres of concern to society, number six of which was “the area of sexuality.” This section began with the following affirmation:

We believe that intolerant attitudes, often cultivated by orthodox religions and puritanical cultures, unduly repress sexual conduct.

It went on to declare:

Short of harming others or compelling them to do likewise, individuals should be permitted to express their sexual proclivities and pursue their lifestyles as they desire.²⁸

In other words, anything goes in sex, short of rape or enforced prostitution. There is nothing wrong with fornication, promiscuity, adultery, homosexuality, incest, or even pederasty or bestiality, as long as all participants agree and no one is hurt. After all, animals do these things, and humans are merely evolved animals, so why not? The Bible and Christianity say that they are wrong and will be subject to divine punishment, but “science” has cleverly freed us from such “orthodox religions and puritanical cultures” in this modern age. So they say, but the explosive growth of sexually transmitted diseases — especially AIDS —

²⁸ Both Humanist Manifest I and Humanist Manifesto II have been published in many places. They may be obtained, for example, from The Humanist Bookstore, 1780 S. Bellaire St., Denver, CO 80222.

as well as divorce, child abuse, and a host of other ills, suggests that an initial wave of divine judgment may already be taking place.

One of the most distressing developments on the modern scene is the breakdown of the institution of the family. In some states there are now at least as many divorces as there are marriages. A large proportion of troubled juveniles are known to come from broken homes. Even many families that manage to stay together seem to experience almost continual bickering and angry clashing, with no clear-cut lines of authority and with low standards of moral behavior.

It is no mere coincidence that this modern deterioration of family life has occurred contemporaneously with the modern universal prevalence of evolutionary teaching. After all, God's creation and man's family life are closely associated in the Bible! The institution of marriage was the first human institution established by God, and the command to have children was God's first commandment to man (Gen. 1:27–28).

Because of the close relation of the home and family to God's creation, it is not surprising when we note today that a sound concept of marital and parental responsibilities goes hand-in-glove with a sound concept of biblical creationism.

Similarly, it is no mere coincidence that the ascendancy of evolutionary philosophy in the past century was quickly followed by the decline of the sanctity of the home and marriage relationships. If man is not the special creation of God, then neither is the home. If man is an evolved animal, then the morals of the barnyard and the jungle are more "natural," and therefore more "healthy" than the artificially imposed restrictions of premarital chastity and marital fidelity. Instead of monogamy, why not promiscuity and polygamy? Instead of training children in the nurture and admonition of the Lord, better to teach them how to struggle and survive in a cut-throat world, and then toss them out of the nest. Self-preservation is the first law of nature; only the fittest will survive. Be the cock-of-the-walk and the king-of-the-mountain! Eat, drink, and be merry, for life is short and that's the end. So says evolution!

Perhaps the greatest indictment of all against evolution is this assault against permanent, monogamous marriage and the sacred obligation of parents and children to each other. A strong emphasis on the full doctrine of biblical creationism, in all its implications (including the proper biblical roles of husband and wife) in both the home and church, is the best investment that can be made toward a happy home life, both in one's own home and in the future homes of one's children, and ultimately toward a healthy society and preparation for eternal responsibilities.

Undoubtedly, many personal and cultural reasons exist for the deterioration of family life in modern society, and most of them can be shown to stem from the naturalistic, evolutionary philosophy that has been indoctrinated in young people for two generations or more through the schools and the media of mass communication. Perhaps the most important such factor involved in this breakdown has been the so-called “sexual revolution.”

Pornography in almost every form is now freely available to all comers, not only in R-rated movies and newsstand paperbacks, but even on national television and in public school textbooks. People are constantly intimidated by “scientific” surveys which purportedly show majorities of both single and married people participating in pre-marital and extra-marital sex adventures, with the persuasive implication that what is done by “everyone” must be normal and therefore right for everyone.

The fact that sex outside of a permanent marriage bond is contrary to Scripture and to God’s revealed will (note Heb. 13:4; Eph. 5:3–5; Matt. 19:3–9; etc.) is considered by evolutionists to be irrelevant, since the Bible is believed to be merely a product of man’s religious evolution in an earlier stage of history and therefore no longer authoritative in our modern age of enlightenment and freedom.

Furthermore, since most animals are indiscriminate with regard to partners in mating and, since men and women are believed to have evolved from animals, then why shouldn’t we *live* like animals? Why develop sexual inhibitions and frustrations that may lead to psychological neuroses?

The modern psychological systems of Freud, Watson, Skinner, Rogers, and other leaders of the different schools of psychological thought today are all (whether Freudian, behavioristic, humanistic, or whatever may be the current fad in this field) based on the assumption that man is an animal, the product of ages of evolutionary struggle.

On this assumption, people are counseled to release the sexual inhibitions that have been imposed on them by religion and act “naturally” (which, interpreted, means to follow all their animal instincts) and engage in whatever sexual activity they desire, with as many partners (of either sex) as they wish. Any unwanted children resulting from such activity can, of course, be taken care of either by abortion or by becoming wards of the state. Some are now even proposing infanticide, the disposal of children after birth.

The concern expressed by Christian parents and pastors over the widespread introduction of sex education courses into the public schools

is precisely because of the prominence of this kind of emphasis (sex as natural, with no moral connotations, based on the assumption of human evolution from an animal ancestry) in the texts and courses offered.

The sad testimony of multitudes of broken homes and broken lives, in contrast with the joyful testimony of multitudes of truly Christian families, is proof enough that evolutionary theory and the sexual revolution philosophy that has been based on it are false and deadly. “A good tree cannot bring forth evil fruit, neither can a corrupt tree bring forth good fruit. Every tree that bringeth not forth good fruit is hewn down, and cast into the fire” (Matt. 7:18–19).

Homosexuality and the Drug Culture

Two other evil fruits of evolutionism are the modern promotion of homosexuality and the explosive increase of drug use, even in “Christian” America. These movements are combined in this section because they are both tied in closely to the sexual revolution, as it has been called, and also because they are the two main culprits in the great AIDS disease that many fear will eventually engulf the world.

While both homosexuality and drug abuse have been present throughout history, they have largely been confined to pagan cultures, where pantheistic evolutionism was the underlying philosophy justifying them. In Europe and America, on the other hand, where accepted social standards were largely built upon biblical morality, these practices were more or less hidden, confined to the anti-Christian occultic subculture that had never been fully eliminated by the professedly Christian majority world view based on creation.

With the sudden ascendance of Darwinian evolutionism in the West, however, these underground vices have become more and more prominent and acceptable even in Christendom, especially now that the materialistic evolutionism of the Darwinians is giving ground to the venerable pantheistic evolutionism of New Age philosophies and psychologies.

One of the most influential promoters of homosexual “rights” has been Dr. John Money, director of psychohormonal research at Johns Hopkins University, the location of one of the nation’s most prestigious medical research installations. In a publication of the famous (or infamous) Kinsey Institute, Dr. Money acknowledges the reliance of the homosexual movement on evolutionism for its apparent justification:

Any theory of the genesis of either exclusive homosexuality or exclusive heterosexuality must address primarily the genesis of bisexuality. Monosexuality, whether homosexual or

heterosexual, is secondary and a derivative of the primary bisexual or ambisexual potential. Ambisexuality has its origins in evolutionary biology and in the embryology of sexual differentiation.²⁹

It is assumed by Money that, since animals are bisexual and generally promiscuous, so too it is natural for their human evolutionary descendants to be bisexual and promiscuous. Money also says:

Therefore, it is likely that acculturation to bisexuality is less a concomitant of inbreeding than it is of the bisexual plasticity of all members of the human species. It is possible that bisexual plasticity may vary over the life span. Later in life it may give way to exclusive monosexuality — or it may not.³⁰

An article in a leading homosexual magazine also stresses the evolutionary “naturalness” of homosexual (or bisexual) behavior, as follows:

Homosexuality is seldom discussed as a component in evolution, but it undoubtedly plays a role. Homosexual behavior has been observed in most animal species studied, and the higher we climb on the taxonomic tree toward mammals, the more apparent homosexual behavior we see.³¹

This author cites observations of such behavior in a wide variety of animal species — specifically mice, hummingbirds, seagulls, and chimpanzees. He suggests its supposed evolutionary advantages in humans as including both relief of tension and also population control!

Even such a “straight” evolutionist as Michael Ruse is ready to acknowledge that homosexuality is a “natural” behavior in animals and, therefore — by evolutionary criteria — in humans.

Is homosexuality biologically unnatural? Modern evolutionary theory suggests that this claim is highly questionable. Certainly we can say with some confidence that homosexual

29 John Money, “Agenda and Crescenda of the Kinsey Scale,” chapter 4 in *Homosexuality/Heterosexuality: Concepts of Sexual Orientation*, ed. David P. McWhirter, Stephanie A. Sanders, and June M. Reinish (New York, NY: Oxford University Press, 1990), p. 45.

30 Ibid., p. 43.

31 Jacob Smit, “In the Beginning: Homosexuality and Evolution,” *International Northwest Guide Magazine*, Issue 19 (August 1987), p. 6.

activity is not (as everyone from Plato on down seems to have assumed) a phenomenon exclusively restricted to humans. Indeed, it is no exaggeration to say that *every* animal species studied with care shows some such behavior.³²

As a matter of fact, the Bible itself implies that homosexual behavior is something animals might do, when it applies the epithet of “dog” to the human homosexual (Deut. 23:17–18).

The difference, however, is that the Bible calls it “sin,” rather than a natural evolutionary heritage. Whatever may or may not explain what evolutionists interpret as homosexual behavior in animals, such behavior is condemned by God in no uncertain terms in human beings. In the theocracy of ancient Israel, homosexuality was a capital crime (Lev. 20:13). It is also the object of severe condemnation in the New Testament (e.g., Rom. 1:24–28).

Despite the amazing propaganda machine currently promoting the notion that AIDS is as much a problem for heterosexuals as for homosexuals and drug users, the fact remains that, even after two decades of such propaganda, AIDS still affects almost exclusively those two groups — plus a few others infected by blood transfusions received from someone in one of these categories. One could certainly make the argument that AIDS is a divine judgment on those who deny God and His Word by this flagrant violation of His primeval standard for the human race as given to the first man and woman (see Gen. 2:22–24). That standard is permanent heterosexual monogamous marriage, preceded by premarital chastity and accompanied by marital fidelity. Evolutionism rejects both the primeval creation and this accompanying divine institution established by the Creator, and God will not be mocked forever.

As far as the explosive modern drug problem is concerned, this is largely a concomitant of the modern sexual revolution, with each tending to promote and accompany the other. To the degree that drug use has any kind of scientific rationale, however, once again we find evolutionary thinking at the root of it.

The evolutionary connection is not as obvious as with some of the other corrupt fruits, of course, because no one suggests that drugs contributed to evolution of the species (de-volution, perhaps!).

32 Michael Ruse, “Evolutionary Theory and Christian Ethics: Are They in Harmony?” *Zygon*, vol. 29 (March 1994), p. 10.

There is an important indirect connection, however. Evolutionism has made God redundant, intellectually at least. Yet, emotionally, people still have a deep-seated need for some sense of meaning to life beyond the hum-drum of everyday living. In the ancient religions (which, as we have noted, were based on evolutionary pantheism), intellectuals found this in a sort of mystical communion with the cosmic “deity,” with Mother Nature, as it were. The common people did essentially the same, only with different specific emanations of that deity, in the form of particular idols representing particular attributes of the deified cosmos. Very often, this experience was stimulated or intensified with drugs (or “sorceries,” as the Greek word *pharmakeis*, from which we get “pharmacy,” is translated in the New Testament).

Christians, of course, can enjoy genuine communion with God through the indwelling Holy Spirit of God, received by faith in Christ and His redeeming work. Others, however, must seek something else to fill the “God-shaped vacuum” in their souls. Since, in the thinking of brain-washed young people indoctrinated in evolution, God does not even exist, they tend to seek a spiritual experience or feeling some other way. Drugs give them a “high,” an experience above themselves, and this is their substitute for fellowship with their Creator.

That, at least, was the teaching of the forerunners and intellectual promoters of the use of hallucinatory drugs — men such as Aldous Huxley and Timothy Leary — and millions have followed these false prophets.

Aldous Huxley, like his brother Julian, was an avowed evolutionist and atheist. He wrote many books along such lines, but his attitude and teachings on this matter were well summarized in an article in *Scientific Monthly*.

But the pharmacologists will give us something that most human beings have never had before. If we want joy, peace, and lovingkindness, they can give us lovingkindness, peace, and joy. If we want beauty, they will transfigure the outside world for us and open the door to visions of unimaginable richness and significance. If our desire is for life everlasting, they will give us the next best thing — eons of blissful experience miraculously telescoped into a single hour. They will bestow these gifts without exacting the terrible price which, in the past, man had to pay for resorting too frequently

to such consciousness-changing drugs as heroin or cocaine or even that good old standby alcohol.³³

It does seem to such intellectuals that heaven itself can be provided — without the cross of Christ — by these new drugs the pharmacologists will develop!

Huxley wrote those words almost 40 years ago, and his followers are still waiting. The drugs can give them strange experiences all right, but there is still a “terrible price” to pay! Huxley still had faith that these future wonder drugs would provide a satisfying substitute for God and His salvation.

Meanwhile, all that one can predict with any degree of certainty is that many of our traditional notions about ethics and religion and many of our current views about the nature of the mind will have to be reconsidered and reevaluated in the context of the pharmacological revolution.³⁴

Tooth and Claw

In the next chapter, we shall consider the effect of evolutionary teaching on the broad conflicts between nations, between races, and between social orders. These have been profound and have been the cause of great suffering throughout history.

Furthermore, these widespread conflicts have naturally had their counterparts in local battles. As the apostle James reminds us: “From whence come wars and fightings among you? come they not hence, even of your lusts that war in your members? Ye lust, and have not: ye kill, and desire to have, and cannot obtain” (James 4:1–2). The root problem, of course, is sin, and both people and nations have been fighting one another all through history, but never since the days of Noah on the fearsome scale that exists today.

There have always been local wars, but now there are global wars, in addition to scores of local conflicts. There have always been robbers and murderers, but now there is organized crime on a vast scale that even controls governments. There have always been individual rebels and law breakers, but now the schools must be patrolled by policemen, and the streets are unsafe everywhere, even in “Christian” nations such as America.

But what could one expect after a century of teaching in our schools that denies God and the Bible, outlaws the Ten Commandments,

³³ Aldous Huxley, “History of Tension,” *Scientific Monthly* (July 1957), p. 9.

³⁴ *Ibid.*

encourages sexual promiscuity, and promotes self-centeredness, all in the revered name of “science,” the euphemism for evolutionism? If individuals and groups are taught continually that progress has come about by way of a “nature red in tooth and claw” (Tennyson), that there is always a “struggle for existence” and the results of that struggle have led to “survival of the fittest,” how can such teaching *not* affect both individual behavior and national policy?

This is easily documented in the case of wars and racism and class struggle, as shown in the next chapter. It may not be so easy to document in individual instances, of course, because people commit sin for all kinds of personal reasons, but the background cause is surely lack of fear of God, as well as either ignorance or rejection of God’s standards. “And even as they did not like to retain God in their knowledge, God gave them over to a reprobate mind, to do those things which are not convenient” (Rom. 1:28). “There is no fear of God before their eyes” (Rom. 3:18).

Once again, all this goes back to the underlying assumption that any personal responsibility to a Creator has been outmoded by modern evolutionism. As a matter of fact, this situation has existed in all those societies, both ancient and modern, built around pantheistic evolutionism, as well as those modern “Christian” societies that have largely capitulated to atheistic Darwinian evolutionism. It is hard to think of a more reasonable explanation than just this for the moral and social chaos that is now plaguing American society. In a book appropriately titled *Created from Animals*, philosopher James Rachels puts it this way:

Darwinism undermines both the idea that man is made in the image of God and the idea that man is a uniquely rational being. Furthermore, if Darwinism is correct, it is unlikely that any other support for the idea of human dignity will be found. The idea of human dignity turns out, therefore, to be the moral effluvium of a discredited metaphysics.³⁵

This type of evil in society, the use of violence to obtain what one desires, has frequently been justified by evolutionary reasoning. Ever since Raymond Dart discovered the first fossil of *Australopithecus* in the mid-1920s, along with what he thought were “tools” used by these so-called “hominids” (or supposed ape-like ancestors of man), it has been widely held that these creatures were carnivorous “killer apes,” who

³⁵ James Rachels, *Created from Animals* (New York, NY: Oxford University Press, 1990), p. 5. Rachels is professor of philosophy at the University of Alabama.

slaughtered animals and probably other hominids for food and possibly for conquest or even sport.

This bloodthirsty attribute of these presumed humanoid ancestors of man supposedly “explains” and even “justifies” man’s instinctive drive to conquer and loot and kill! This “caveman” caricature of ancient men and women has been inordinately popularized in comic strips and motion pictures and even school books for many years, but anthropologists now know that it is false. The bones of animals supposedly slaughtered, skinned, scraped, and eaten by the australopithecines had been misinterpreted all along.

They concluded that the australopithecines, like the baboons and antelopes from the same deposits, had been dragged into the caves and eaten by leopards and carnivores. Most and probably all of the bone tools were scraps from a cat’s lunch — and so were the remains of the supposed killer apes.³⁶

Men and women may be prone to all sorts of violent and selfish behavior, but this is because of sin in their hearts, not animals in their ancestry. It needs to be condemned and judged, unless first repented, forgiven, and forsaken — not coddled and justified on the basis of evolutionary presuppositions, as even the courts have been so quick to do in recent decades.

Still another animalistic practice is now beginning to be advocated, on the basis of evolutionism. Once abortionism has become acceptable, infanticide cannot be far behind, as well as other “checks” on population growth (euthanasia, etc.).

Among some animal species, then, infant killing appears to be a natural practice. Could it be natural for humans too, a trait inherited from our primate ancestors? . . . Charles Darwin noted in *The Descent of Man* that infanticide has been “probably the most important of all checks” on population growth throughout most of human history.³⁷

There have already been many attempts even at genocide in the name of evolutionary progress, such as the slaughter of the aborigines in Tasmania by white settlers, who argued that these “primitives”

36 Matt Cartmill, “Four Legs Good, Two Legs Bad,” *Natural History*, vol. 92 (November 1983), p. 76.

37 Barbara Burke, “Infanticide,” *Science* 84 (May 1984), p. 29.

were not really human, the gas ovens of Nazi Germany in the name of Aryan racial supremacy, and others.

If evolution is the real law of life, then practices such as these may really contribute to the overall progress of evolution, as their practitioners allege. It is hard to offer an effective scientific argument against them, if evolution is true.

A leading humanist philosopher and historian, Will Durant, made the following comments shortly before he died:

By offering evolution in place of God as a cause of history, Darwin removed the theological basis of the moral code of Christendom. And the moral code that has no fear of God is very shaky. That's the condition we are in.³⁸

The founding fathers of our great nation were God-fearing men, and our laws were based essentially on the laws of God as recorded in the Holy Scriptures. But we have now arrived at a situation where our traditional freedom *of* religion is interpreted by our courts and schools and media as freedom *from* religion (or at least freedom from the *true* religion of the Bible). It is no wonder that we are heading fast into chaos. As Will Durant put it:

Order is the mother of liberty, liberty is the mother of chaos, chaos is the mother of dictatorship.³⁹

38 Will Durant, "We are in the Last Stage of a Pagan Period," *Chicago Tribune Syndicate* (April 1980).

39 Ibid.

Chapter 4

Evolutionism and Its Deadly Social Philosophies

Many writers, both Christian and non-Christian, have pointed out the evolutionistic base of such deadly social philosophies as communism and Nazism, as well as racism and laissez-faire capitalism. Modern evolutionists react angrily when attention is called to this fact, but it *is* a fact, as can be easily confirmed in the literature of the theoreticians and practitioners of each of these systems.

In this chapter, we want to examine, in more or less the chronological order of their respective heydays, the following systems, all of which were rationalized by their founders and promoters as based on the premise of evolution. First, we shall consider “social Darwinism,” the laissez-faire capitalistic system which developed along with so-called “scientific Darwinism” and had (and still has, in some degree) great influence in Europe and America, with spillover effects in Asia, Africa, and Australia. Then we shall look at modern racism, followed by Fascism and Nazism, then communism, and finally the New Age philosophies.

Social Darwinism

In the last half of the 19th century, a widespread philosophy known as social Darwinism dominated the thinking of many of the industrial tycoons of the era.

As the steel magnate Andrew Carnegie put it after reading Darwin and Spencer: “Not only had I got rid of theology and the supernatural, but I had found the truth of evolution. *All is*

well since all grows better became my motto, my true source of comfort.”¹

Similar philosophies were expressed by such men as John D. Rockefeller, the oil baron; James Hill, the railroad magnate; and numerous others, all impressed by the teachings of Herbert Spencer in England and William Grant Sumner in the United States, epitomized by the famous slogan “struggle for existence and survival of the fittest.”

This right-wing type of Darwinism also led to racism and imperialism, and even to Fascism and Hitlerism, whereas a left-wing approach to evolutionary thought became basic in Marxist-Leninism and Communism. Both systems are anti-creationist, anti-biblical, and anti-Christian, and even when they fight with each other, they remain united in opposition to creationism and biblical fundamentalism.

The familiar Darwinian bywords “struggle for existence” and “survival of the fittest” were not actually coined by Darwin, but by two of his immediate predecessors, Thomas Malthus and Herbert Spencer, respectively. Each of these men had a profound influence on Darwin’s thinking, and he appropriated these slogans to his own use in trying to explain and promote his ideas of “natural selection” in the animal kingdom.

They were also ideally suited mottoes for exploitation by the industrialists and militarists of the 19th century in their own agendas.

Spencer coined the phrase *survival of the fittest*, and Darwin adopted the parlance in later editions of his *Origin of Species*. . . . According to Spencer and his American disciples — business entrepreneurs like John D. Rockefeller and Andrew Carnegie — social hierarchy reflects the unwavering, universal laws of nature. Nature unfolds in such a way that the strong survive and the weak perish. Thus, the economic and social structures that survive are “stronger” and better, and those structures that don’t were obviously meant to founder. It is *better* that capitalism has survived the Cold War just as it was better that the mammals survived the Mesozoic Era when dinosaurs became extinct. “How do we know that capitalism is better than Communism and that the

1 Cited in Edward Kirkland’s “Introduction,” Dale Carnegie, *The Gospel of Wealth* (Cambridge, MA: Harvard University Press, 1962).

mammal is better than the dinosaur? Because they survived, of course.”²

Modern evolutionists, such as the author of the above quotation, today deplore the excesses of social Darwinism. The fact is, however, that it became very popular among the laissez-faire capitalists of the 19th century because it did, indeed, seem to give scientific sanction to ruthless competition in both business and politics. A current leader among evolutionary geologists is Dr. Kenneth Hsu, a Chinese scientist now teaching in Switzerland. He has frequently inveighed against Darwinism as a science, precisely because it sanctioned exploitation of his own people.

Darwinism was also used in a defense of competitive individualism and its economic corollary of laissez-faire capitalism in England and in America. Andrew Carnegie wrote that “the law of competition, be it benign or not, is here; we cannot evade it.” Rockefeller went a step further when he claimed that “the growth of a large business is merely a survival of the fittest; it is merely the working out of a law of nature and a law of God.”³

Another modern evolutionist who would like to divest himself of the Darwinian heritage, even while retaining his commitment to evolutionism, is a prominent philosopher now at the University of Alabama. He writes as follows:

“The survival of the fittest” was quickly interpreted as an ethical precept that sanctioned cutthroat economic competition.⁴

The fact that this evolutionary competition involved exploitation of labor—even child labor—as well as monopolistic elimination of smaller competitors, and even strong-arm tactics against dissenters, was justified as good in the long run, in the name of evolutionary “science.”

Capitalist giants such as John D. Rockefeller and Andrew Carnegie regularly invoked what they took to be “Darwinian” principles to explain the ethics of the American system. Rockefeller, in a talk to his Sunday school class, proclaims that . . . “the American Beauty rose can be produced in the splendor

2 Stephen T. Asma, “The New Social Darwinism: Deserving Your Destitution,” *The Humanist* (September/October 1993), p. 11.

3 Kenneth J. Hsu, “Darwin’s Three Mistakes,” *Geology*, vol. 14 (June 1986), p. 534.

4 Rachels, *Created from Animals*, p. 63.

and fragrance which bring cheer to its beholder only by sacrificing the early buds which grow up around it.” . . . Carnegie, who became a close friend of Spencer’s, was equally rhapsodic: in defending the concentration of wealth in the hands of a few big businessmen, he proclaimed that “While the law may sometimes be hard for the individual, it is best for the race, because it ensures the survival of the fittest in every department.”⁵

Both Rockefeller and Carnegie originally considered themselves to be Christians — though of liberal persuasion. Carnegie gave up his professed belief completely when he became a Darwinian.

Andrew Carnegie, who practically worshipped Spencer, replaced his disenchanted Christian theology with the *laissez-faire* motto “All is well since all grows better.” These capitalist moguls eagerly embraced a metaphysics that provided the ultimate justification for their ruthless business tactics.⁶

We have referred mainly to Rockefeller and Carnegie as the two best-known social Darwinists, but this attitude prevailed among many — probably most — of the business and industrial leaders of the capitalist countries. It is still true today among many leading political and economic “conservatives.”

This “survival of the fittest” philosophy was also applied on the national scale. The western nations, in Europe especially, assumed that they had been proved the “fittest,” and so assumed that they should subjugate and dominate the less “advanced” nations and tribes of the world. This imperialistic compulsion led to their supposed “white man’s burden,” involving exploration and conquest of many African, Asian, and Australian regions. Other motivations stimulated this desire for territorial expansion long before Darwin, of course — greed, ambition, even missionary zeal — but Darwinism (as well as earlier evolutionary philosophies) gave it an *apparent* scientific rationale.

Even today after many of these once-subject nations have been “liberated” and given self-rule, the more “advanced” nations still have a patronizing attitude toward the “third world,” still trying to dominate them economically, if not militarily.

The idea that whole populations — whether abroad or at home — are “naturally unfit” is the ultimate license for social

5 Rachels, *Created from Animals*, p. 64.

6 Asma, “New Social Darwinism,” p. 11.

policies of domination. Indeed, domination is for us a virtue rather than a vice. If one pauses for a moment to reflect on whether or not the “natural law of competition” is sound, then one is immediately suspected of impiety. The church of capitalism watches its flock carefully.⁷

It is worth noting, at least briefly, that social Darwinism also played an important role in Japanese imperialism. The exportation of Darwinism to Asia eventually resulted in communism in China, but Japan was more influenced by social Darwinism, as evinced, for example, by her alliance with Hitler in World War II.

A fascinating paper by Dr. Hiroshi Unoura, a social scientist on the Faculty of Arts and Sciences at Kitasato University in Tokyo, has outlined the development of social Darwinism in Japan, giving the reasons for its rapid acceptance and application. He notes that social Darwinism was accepted more rapidly in Japan than was biological evolutionism, because of the easy-to-understand ideas of struggle and survival. Evolutionism was officially promoted in the university system, using western-educated professors, in order to accelerate westernization of the culture and also to replace Japanese feelings of racial inferiority with feelings of superiority.⁸

Evolutionism was also promoted out of opposition to Christianity, since it was assumed that it was anti-Christian, despite the fact that some of the most influential Japanese Christians were promoting theistic evolutionism. Japanese Buddhists in particular promoted the assimilation of evolutionary theory into their Buddhist system, arguing thereby that Buddhism was more “scientific” than Christianity. Today, evolutionism dominates all the schools and universities of Japan, and the Japanese intellectuals now tend to believe that, in the Darwinian struggle, they are no longer an inferior race, but superior to the Caucasians.

Ultimate Evolutionism — Nazism and the Master Race

Though not much in vogue currently, the fascistic systems of Hitler, Mussolini, and others almost conquered the world a generation ago. There are even now neo-Nazi movements that bear watching, as well as various dictatorships of similar character around the world — not to mention the “new left” student movement of the sixties and seventies, which strangely resembled the early days of Nazism.

⁷ Ibid., p. 12.

⁸ Hiroshi Unoura, “Samurai Darwinism: A Reception and Development of Social Darwinism in Early Modern Japan.” Unpublished paper presented at the Japan Forum, Harvard/M.I.T. (March 12, 1993).

In any case, all such ideologies, built up as they are on the concepts of racism and statist totalitarian aggression and control, are direct products of the Darwinian doctrines of struggle for existence and survival of the fittest. Friedrich Nietzsche, the philosophical father of these systems, was an ardent evolutionist, as were his spiritual children, Hitler and Mussolini.

From the “Preservation of Favoured Races in the Struggle for Life” (i.e., Darwin’s subtitle to *Origin of Species*) it was a short step to the preservation of favored individuals, classes, or nations — and from their preservation to their glorification. Social Darwinism has often been understood in this sense: as a philosophy, exalting competition, power, and violence over convention, ethics, and religion. Thus it has become a portmanteau of nationalism, imperialism, militarism and dictatorship, of the cults of the hero, the superman, and the master race . . . recent expressions of this philosophy, such as (Hitler’s) *Mein Kampf*, are, unhappily, too familiar to require exposition here. And it is by an obvious process of analogy and deduction that they are said to derive from Darwinism. . . . Nietzsche predicted that this would be the consequence if the Darwinian theory gained general acceptance.⁹

It might be appropriate to refer again (footnote 30, chapter 1), at this point, to the classic volume on evolutionary ethics by Sir Arthur Keith. When he wrote his book, he had just been through World War II, enduring with other Britons the awful suffering visited by Adolph Hitler on England and the world. He certainly did not write out of any feeling of sympathy for Hitler and his cause. Yet his correct understanding of the real nature of evolution, in which he firmly and fully believed, impelled him to say the following:

To see evolutionary measures and tribal morality being applied vigorously to the affairs of a great modern nation, we must turn again to Germany of 1942. We see Hitler devoutly convinced that evolution produces the only real basis for a national policy. . . . The means he adopted to secure the destiny of his race and people were organized slaughter, which has drenched Europe in blood. . . . Such conduct is highly immoral

9 Gertrude Himmelfarb, *Darwin and the Darwinian Revolution* (London: Chatto and Windus Publ., 1959), p. 343–344.

as measured by every scale of ethics, yet Germany justifies it; it is consonant with tribal or evolutionary morality. Germany has reverted to the tribal past, and is demonstrating to the world, in their naked ferocity, the methods of evolution.¹⁰

Continuing, Keith lauds political evolutionism thus:

The German Fuhrer, as I have consistently maintained, is an evolutionist; he has consciously sought to make the practice of Germany conform to the theory of evolution. He has failed, not because the theory of evolution is false, but because he had made three fatal blunders in its application.¹¹

Modern American evolutionists may be embarrassed by this philosophical association with the Fascism and Nazism of Mussolini and Hitler, but it is nevertheless a fact, and it is a fact that certainly ought to awaken *theistic* evolutionists, at least, to the real nature of the theory with which they have been willing to become identified for the sake of academic prestige. If one really feels he must believe in evolution, he should at least leave God out of it. The very idea of “theistic” evolution is a contradiction in terms, an oxymoron, like “theistic atheism” or “flaming snowflakes.” The evil fruits of evolution are strong evidence of its bitter roots.

The Christian philosopher Francis Schaeffer has commented incisively on the Darwinian basis of German militarism and Nazism:

Later, these ideas helped produce an even more far-reaching yet logical conclusion: the Nazi movement in Germany. Heinrich Himmler (1900–1945), leader of the Gestapo, stated that the law of nature must take its course in the survival of the fittest. The result was the gas chambers. Hitler stated numerous times that Christianity and its notion of charity should be “replaced by the ethic of strength over weakness.” . . . Thus, many factors created the situation. But in that setting the theory of the survival of the fittest sanctioned what occurred.¹²

One of the most remarkable aspects of the rise of Hitler and the Nazis is that it was strongly encouraged and promoted by the German scientific

10 Sir Arthur Keith, *Evolution and Ethics* (New York, NY: Putnam, 1947), p. 28.

11 Ibid., p. 230.

12 Francis Schaeffer, *How Should We Then Live?* (New York, NY: Revel, 1976), p. 151.

establishment. Evolutionary scientists in America may decry the excesses of German militarism under the Kaiser in World War I and Hitler in World War II, but these were fully accepted and implemented by the German scientists of those periods. These men, often considered even in the West as outstanding scientists, were all Darwinian and Haeckelian evolutionists, building on the immoral foundation laid down especially by Nietzsche and Haeckel, back in Darwin's day.

It is well-known that the event that convinced the great liberal statesman William Jennings Bryan that he should devote the energies of his later years to fighting evolutionism was when he learned that the German militarists who had led their country into provoking and fighting the First World War had been inspired to do so by their belief in Darwinism as the key to national struggle and supremacy.

Hitler, after World War I, was even more firmly committed to evolutionism than any German leader before him. He was the ultimate evolutionist, if ever there was such a person. But he also was firmly backed by the evolutionary scientists of Germany, who had become convinced followers of Ernst Haeckel and Charles Darwin. It was their conviction that the Germans were destined to be one of the most "favored races in the struggle for life," as Darwin had expressed it, and so they proceeded to develop their scientific studies and political policies accordingly.

A revealing book, appropriately entitled *Murderous Science*, was written by Benno Muller-Hull and published by Oxford University Press in 1988. Reviewing this book, the American anthropologist Robert Proctor comments as follows:

The thesis of the work is that "human genetics played a crucial role in the atrocities committed by the Nazis."

Evidence for this claim is powerful, and disturbing, Eugene Fischer, for example, as head of the Kaiser Wilhelm Institute for Anthropology, Human Genetics and Eugenics (1927–1942), supervised the training of SS physicians and helped to administer the sterilization of German-Negro half-breeds in the Rhineland.¹³

Proctor himself has written incisively on this same theme. Matt Cartmill, of the Duke University Department of Biological Anthropology,

¹³ Robert N. Proctor, "Science and Nazism." Review of *Murderous Science*, by Benno Muller-Hull (New York, NY: Oxford University Press, 1988), *Science*, vol. 241 (Aug. 5, 1988), p. 730.

in a review of a symposium on anthropology also published in 1988, has comments on Proctor's studies:

In his lucid and disturbing chapter, "From *Anthropologie* to *Rassenkunde*," Robert Proctor traces the development of physical anthropology in Germany from a medical anatomists' hobby into the clinical specialty of *Rassenhygiene*. He shows how the major German societies of physical anthropologists collaborated with the SS program of race hygiene, helping to make racial policy, train SS physicians, and organize Gestapo sterilization programs. Eugene Fischer, the most distinguished of German physical anthropologists, regarded by many as the founder of human genetics, was particularly helpful in these efforts.¹⁴

Proctor, reviewing Muller-Hull's book, makes the following cogent observation:

Muller-Hull stresses that Nazi racial policy was the work of trained scholars, not ignorant fanatics: how else are we to interpret the fact that 7 out of 14 participants at the notorious Wannsee conference (outlining plans for the "final solution") possessed doctorates, or that leading German psychiatrists were mobilized with hardly a single protest to exterminate Germany's mentally ill?¹⁵

George Stein concurs that German racial policies were based on what the German scientists taught as sound science.

National socialism . . . was ultimately the first fully self-conscious attempt to organize a political community on a basis of an explicit biopolicy: a biopolicy fully congruent (or so it was claimed) with the scientific facts of the Darwinian revolution.¹⁶

Robert Proctor, continuing with his review of the remarkable book *Murderous Science*, comments as follows:

14 Matt Cartmill, "Misdeeds in Anthropology." Review of *Bones, Bodies, Behavior: Essays on Biological Anthropology*, ed. George W. Stocking, Jr. (Wisconsin University Press, 1988), *Science*, vol. 244 (May 19, 1989), p. 858.

15 Robert N. Proctor, "Science and Nazism," p. 731.

16 George J. Stein, "Biological Science and the Roots of Nazism," *American Scientist*, vol. 76 (January/February 1988), p. 52.

Much of this book reads as a catalog of horrors. We read how scholars at the Kaiser Wilhelm Institute for Brain Research scrambled to obtain the brains of murdered mentally ill (for purposes of dissection), and how the German Association for Scientific Research (DFG) provided support for Otmar von Verschuer, Fischer's successor at the Kaiser Wilhelm Institute for Anthropology, to have his assistant, Josef Mengele, prepare and ship eyes, blood, and other body parts back to Berlin for analysis.¹⁷

That such "horrors" are not unthinkable even in America is evident from the current push by U.S. scientists to make aborted fetuses available for scientific research, or even to produce embryos in the laboratory merely for research.

And, speaking of Josef Mengele, this immoral monster was in charge of the racial purification program at Auschwitz, yet was a highly respected scientist. He held both a Ph.D. from the prestigious University of Munich and an M.D. from the University of Frankfurt. Two of his biographers note that his zeal was based on "mainline science theory," not on alleged sadistic and psychopathic tendencies in his nature.

His real interest in genetics and evolution happened to coincide with the developing concept that some human beings afflicted by disorders were unfit to reproduce, even to live. . . . His consummate ambition was to succeed in this fashionable new field of evolutionary research.¹⁸

Eventually, in the eyes of Nazi evolutionary scientists, those "unfit to live" came to include not only people who were mentally ill or physically handicapped, but also Jews, Negroes, gypsies, and any others who did not have "pure" Teutonic genealogies. All of this was considered to be in the ultimate interest of the evolutionary advance of — as Darwin had put it — "the preservation of favored races in the struggle for life."

Hitler continually emphasized this concept of evolutionistic struggle in his own writings. In fact, the very title of his definitive book, *Mein Kampf*, meant "My Struggle." Hitler and his Nazis were the true evolutionists, in the fullest sense. As Stein says:

17 Robert N. Proctor, "Science and Nazism," p. 731.

18 G.L. Posner and J. Ware, *Mengele* (New York, NY: McGraw-Hill Book Co., 1986), p. 23.

The Germans, who focused on selection and the “struggle,” or *Kampf* as it was translated, were closer to the radical insight of Darwin’s efforts.¹⁹

Thus, German scientists — especially the geneticists, anthropologists, and psychiatrists, all firm believers in Darwinism — played a vital role in the atrocities of Hitler’s Germany. And the frightening concomitant is that, at least until Hitler’s actual military aggressions got under way, American and British scientists (who were also, for the most part, evolutionary racists at that time) seemed to approve this philosophy, or at least to condone it, in the name of science.

But surely American physical anthropologists spoke out clearly against the Nazi perversion of their science? They did not. Elazar Barkan’s chapter relates their failure in depressing detail.²⁰

Robert Proctor summarizes his own review of this damning period in the history of evolutionary science as follows:

What is slowly becoming clear is that scientists and physicians played a much greater role in the construction of Nazi policy than has heretofore been recognized; new efforts will no doubt continue to shed light on this darker, hidden chapter in the history of science.²¹

A Christian social and biological scientist, Dr. Jerry Bergman, has more recently published a most insightful and thoroughly documented study on “this darker chapter in the history of science.” He summarized his findings and analysis as follows:

A review of the writings of Hitler and contemporary German biologists finds that Darwin’s theory and writings had a major influence on Nazi policies. . . . In the formation of his racial policies, [Hitler] relied heavily upon the Darwinian evolution model, especially the elaborations by Spencer and Haeckel. They culminated in the “final solution,” the extermination of approximately six million Jews and four million other people who belonged to what German scientists judged were “inferior races.”²²

19 George J. Stein, “Biological Science and Nazism,” p. 53.

20 Matt Cartmill, “Misdeeds in Anthropology,” p. 858.

21 Robert N. Proctor, “Science and Nazism,” p. 731.

22 Jerry Bergman, “Eugenics and the Development of Nazi Racial Policy,” *Perspectives on Science and Christian Faith*, vol. 44 (June 1992), p. 109.

Racism and the Struggle for Life

Racism in perhaps its most virulent form came to fruition under Hitler and the Nazis in Germany in connection with World War II. However, racism in one form or another has been a part of human society all through history. Ever since Babel, when God separated the rebelling human populations into different nations and languages, there has been a sinful tendency for each national or tribal group to consider itself as either superior or inferior with respect to other groups, and this has led to what we call racism and racial conflicts.

This attitude is contrary to Scripture, of course, though there have been occasional attempts by some to find a pseudo-biblical rationale for it. The only supposed *scientific* rationale for racism, however, has been evolutionism, especially Darwinism. In fact, Darwin and Huxley and practically all the evolutionary scientists of the 19th century were doctrinaire racists, long before Hitler. As far as the Bible is concerned, the only “race” is the human race. Neither the word nor the concept of race is even mentioned at all in the Scriptures. “[God] hath made of one blood all nations of man for to dwell on all the face of the earth” (Acts 17:26). On the other hand, the subtitle of Darwin’s *Origin of Species* was “The Preservation of Favored Races in the Struggle for Life.”

The Germanic pride which led to the belief that the Teutonic Aryans were superior to other races was given a tremendous boost by Darwin’s theories on “the preservation of favored races.”

Darwin’s notion of struggle for survival was quickly appropriated by the racists . . . such struggle, legitimized by the latest scientific views, justified the racists’ conception of superior and inferior peoples . . . and validated the struggle between them.²³

It was not just in Germany, however, that scientific racism thrived. Darwin, Huxley, and others promoted such views in England, and the same was true of leading biologists and anthropologists in the United States, even well into the 20th century. The most influential American physical anthropologists (Osborn, Hooton, Hrdlicka, *et al.*) argued that the Caucasians were superior and the Africans inferior races.

Typical of prominent American biologists was the eminent Edwin G. Conklin, professor of biology at Princeton University, who said:

²³ Karl A. Schleunes, *The Twisted Road to Auschwitz* (Urbana, IL: University of Illinois Press, 1970), p. 30, 32. Cited by J. Bergman, “Eugenics and Nazi Racial Policy,” p. 118.

Comparison of any modern race with the Neanderthal or Heidelberg types show that . . . Negroid races more closely resemble the original stock than the white or yellow races. Every consideration should lead those who believe in the superiority of the white race to strive to preserve its purity and to establish and maintain the segregation of the races.²⁴

This is not to say, of course, that modern evolutionists are all racists. It is no longer popular in America to be a racist, and liberals of every academic persuasion, including most (not all) modern evolutionary biologists decry and eschew racism.

This was not true of the 19th-century evolutionists, however. An important book has thoroughly reviewed this subject and demonstrated that literally *all* of the leading 19th-century evolutionists believed in the evolutionary superiority of the white race and the inferiority of the others, especially the Negro.²⁵ One reviewer said:

This is an extremely important book, documenting as it does what has long been suspected: the ingrained, firm, and almost unanimous racism of North American men of science during the 19th (and into the 20th) century. . . . *Ab initio*, Afro-Americans were viewed by these intellectuals as being in certain ways unredeemably, unchangeably, irrevocably inferior.²⁶

A reviewer in another scientific journal noted the following argument in the book:

What was new in the Victorian period was Darwinism. . . . Before 1859, many scientists had questioned whether blacks were of the same species as whites. After 1859, the evolutionary schema raised additional questions, particularly whether or not Afro-Americans could survive competition with their white near-relations. The momentous answer was a resounding no. . . . The African was inferior because he represented the “missing link” between ape and Teuton.²⁷

24 Edwin G. Conklin, *The Direction of Human Evolution* (New York, NY: Scribner's, 1921), p. 34. Cited by Bergman, “Eugenics and Nazi Racial Policy,” p. 115.

25 John S. Haller, Jr., *Outcasts from Evolution: Scientific Attitudes of Racial Inferiority, 1859–1900* (Urbana, IL: University of Illinois Press, 1971).

26 Sidney M. Mintz, *American Scientist*, vol. 60 (May/June 1972), p. 387.

27 John C. Burham, *Science*, vol. 175 (February 4, 1972), p. 506.

With this kind of evolutionary thinking essentially universal, it is no wonder that the concepts of race were so important in the development of the master-race idea. Not only, however, were Hitler and others of his ilk ardent evolutionary racists, but so were Karl Marx and his socialist and communist colleagues, all on the basis of their evolutionary idealogies.

On hearing this remark, the present writer asked the administrator whether this doctrine would not imply that the colonial, minority, and primitive peoples, those who had had less chance for mental and physical development, were not also genetically less advanced than the dominant ones. "Ah yes," he replied in confidential manner and after some hesitation, "yes, we must admit that this is, after all, true. They are in fact inferior to *us* biologically in every respect, including their heredity. And that," he added, "is in fact the official doctrine."²⁸

For that matter, Charles Darwin himself was convinced of such assumed white superiority. Although he was opposed to slavery, he too thought that the Negro was of a backward race, and was doomed to become extinct in future evolutionary competition with the more favored races.

The very idea of "race," of course, was an evolutionary concept, not a biblical or Christian concept. To evolutionists, a race was essentially a sub-species, which, if isolated long enough, might well evolve into a new species, so the theory goes. Although most modern evolutionists hold to the monophyletic (single line), rather than polyphyletic origin of man, they do believe that the various races have been distinct for at least several score thousand years, so that ample time has been available to evolve significant differences between them. This possibility was mentioned even by such an ardent modern evolutionist as the late George Gaylord Simpson, who would, of course, have indignantly denied any charge of racism against himself.

Evolution does not necessarily proceed at the same rate in different populations, so that among many groups of animals it is possible to find some species that have evolved more slowly, hence are now more primitive, as regards some particular trait or even overall. It is natural to ask — as many have asked —

28 Conway Zirkle, *Evolution, Biology and the Social Scene* (Philadelphia, PA: University of Pennsylvania Press, 1959), p. 335.

whether among human races there may not similarly be some that are more primitive in one way or another or in general. It is indeed possible to find single characteristics that are probably more advanced or more primitive in one race than in another.²⁹

Now, of course, our whole point in this discussion is to show that, rightly or wrongly, evolutionary thinking is at the root of modern racism and racial conflicts. Once again, this is not meant at all to imply that all or even most modern evolutionists are themselves racists. It is just that evolution *itself* is fundamentally racist. As Sir Arthur Keith maintained:

Christianity makes no distinction of race or of color; it seeks to break down all racial barriers. In this respect the hand of Christianity is against that of Nature, for are not the races of mankind the evolutionary harvest which Nature has toiled through long ages to produce? May we not say, then, that Christianity is anti-evolutionary in its aim? This may be a merit, but if so it is one which has not been openly acknowledged by Christian philosophers.³⁰

The Bible, Evolution, and Modern Racism

Some people today, especially those of anti-Christian opinions, still have the mistaken notion that the Bible prescribes permanent racial divisions among men and is, therefore, the cause of modern racial hatreds. As a matter of fact, the Bible says nothing whatever about race. As far as one can learn from a study of Scripture, the writers of the Bible never referred to distinct races of men, in the sense of black and yellow and white races, or Caucasian and Mongol and Negroid races, or any other such divisions.

The biblical divisions among men are those of “tongues, families, nations, and lands,” (Gen. 10:5, 20, 31) rather than races. The vision of the redeemed saints in heaven (Rev. 7:9) is one of “all nations, and kindreds, and people, and tongues,” but no mention is made of “races.” The formation of the original divisions, after the Flood, is based on different languages (Gen. 11:6, 9), supernaturally imposed by God, but nothing is said about any other physical differences.

Some have interpreted the Noahic prophecy concerning his three sons (Gen. 9:25–27) to refer to three races — Hamitic, Semitic, and

29 George Gaylord Simpson, “The Biological Nature of Man,” *Science*, vol. 152 (April 22, 1966), p. 475.

30 Sir Arthur Keith, *Evolution and Ethics*, p. 72.

Japhetic — but such a meaning is in no way evident from the words of this passage. The prophecy applies to the descendants of Noah's sons, and the various nations to be formed from them, but nothing is said about three races. Modern anthropologists and historians have employed a much different terminology than this simple trifurcation (three-race division) for what they consider to be the various races among men.

Therefore, the origin of the concept of "race" must be sought elsewhere than in the Bible. If certain Christian writers have interpreted the Bible in a racist framework, the error is in the interpretation, not in the Bible itself. In the Bible, there is only one race — the human race!

In recent terminology, a race of men was thought to involve quite a large number of individual national and language groups. It was, therefore, a much broader generic concept than any of the biblical divisions. In the terminology of biological taxonomy, it was roughly the same as a "variety," or a "sub-species." Biologists, of course, use the term to apply to sub-species of animals, as well as men.

When Charles Darwin selected as the subtitle for his book the phrase "The Preservation of Favoured Races in the Struggle for Life," it was clear from the context that he had races of animals primarily in mind, but at the same time it is also clear, as we shall see, that he thought of races of men in the same way.

That this concept was still held until very recently is evident from the following words of leading modern evolutionist George Gaylord Simpson:

Races of men have, or perhaps one should say "had," exactly the same biological significance as the sub-species of other species of mammals.³¹

It is evident, therefore, that a race is not a biblical category, but rather is a category of evolutionary biology. Each race is a sub-species, with a long evolutionary history of its own, supposedly in the process of evolving gradually into a distinct species.

One leading evolutionist suggests that each of the races has been around a long while.

The simplest interpretation of this conclusion today would envision a relatively small group starting to spread not long after modern man appeared. With the spreading, groups became separated and isolated. Fifty thousand years or so is a short time in evolutionary terms, and this may help to explain

31 George Gaylord Simpson, "The Biological Nature of Man," p. 474.

why, genetically speaking, human races show relatively small differences.³²

As applied to man, this concept, of course, suggests that each of the various races of men is very different (though still interfertile) from all of the others. If they continue to be segregated, each will continue to compete as best it can with the other races in the struggle for existence, and finally the fittest will survive. Or else, perhaps, they will gradually become so different from each other as to assume the character of separate species altogether (just as apes and men *supposedly* diverged from a common ancestor in the so-called Tertiary Period).

Most modern biologists today would express these concepts somewhat differently than as above, and they undoubtedly would disavow the racist connotations. Nevertheless, this was certainly the point of view of the 19th century evolutionists, and it is difficult to interpret modern evolutionary theory, at least the so-called neo-Darwinian synthesis, much differently.

The rise of evolutionary theory took place mostly in Europe, especially in England and Germany. Europeans, along with their American cousins, were then leading the world in industrial and military expansion, and were, therefore, inclined to think of themselves as somehow superior to the other nations of the world. This opinion was tremendously encouraged by the concurrent rise of Darwinian evolutionism and its simplistic approach to the idea of struggle between natural races, with the only strongest surviving and thus contributing to the advance of evolution.

As the 19th century scientists were converted to evolution, they were thus also convinced of racism. They were certain that the white race was superior to other races, and the reason for this superiority was to be found in Darwinian theory. The white race had advanced further up the evolutionary ladder and, therefore, was destined either to eliminate the other races in the struggle for existence or else to have to assume the "white man's burden" and to care for those inferior races that were incompetent to survive otherwise.

Charles Darwin himself, though strongly opposed to slavery on moral grounds, was convinced of white racial superiority. He wrote on one occasion as follows:

I could show fight on natural selection having done and doing more for the progress of civilization than you seem

32 L.L. Cavalli-Sforza, "The Genetics of Human Populations," *Scientific American*, vol. 231 (September 1974), p. 89.

inclined to admit. . . . The more civilized so-called Caucasian races have beaten the Turkish hollow in the struggle for existence. Looking to the world at no very distant date, what an endless number of the lower races will have been eliminated by the higher civilized races throughout the world.³³

The man more responsible than any other for the widespread acceptance of evolution in the 19th century was Thomas Huxley. Soon after the American Civil War, in which the Negro slaves were freed, he wrote as follows:

No rational man, cognizant of the facts, believes that the average Negro is the equal, still less the superior, of the white man. And if this be true, it is simply incredible that, when all his disabilities are removed, and our prognathous relative has a fair field and no favour, as well as no oppressor, he will be able to compete successfully with his bigger-brained and smaller-jawed rival, in a contest which is to be carried out by thoughts and not by bites.³⁴

Racist sentiments such as these were held by all the 19th century evolutionists, as shown by Haller in the book mentioned previously.

In a day and age that practically worshipped at the shrine of scientific progress, as was true especially during the century from 1860 to 1960, such universal scientific racism was bound to have repercussions in the political and social realms. The seeds of evolutionary racism came to fullest fruition in the form of National Socialism in Germany. The philosopher Friedrich Nietzsche, a contemporary of Charles Darwin and an ardent evolutionist himself, popularized in Germany his concept of the superman, and then the master race. The ultimate outcome was Hitler, who elevated this savage philosophy to the status of a national policy.

In recent decades, the cause of racial liberation has made racism unpopular with intellectuals and only a few evolutionary scientists still openly espouse the idea of a long-term polyphyletic origin of the different races.³⁵ On the other hand, in recent years, the pendulum has swung, and

33 Charles Darwin, *Life and Letters*, I, letter to W. Graham, July 3, 1881, p. 316; cited in *Darwin and the Darwinian Revolution*, by Gertrude Himmelfarb (London: Chatto and Windus, 1959), p. 343.

34 Thomas Huxley, *Lay Sermons, Addresses and Reviews* (New York, NY: Appleton, 1871), p. 20.

35 One notable exception, among others, was the leading anthropologist Carleton Coon. See *The Origin of Races* (New York, NY: Alfred Knopf, 1962).

we have had highly vocal advocates of “black power” and “red power” and “yellow power,” and these advocates are all doctrinaire evolutionists also, who believe their own respective “races” are the fittest to survive in man’s continuing struggle for existence.

According to the biblical record of history, however, the Creator’s divisions among men are linguistic and national divisions, *not racial*. Each nation has a distinct purpose and function in the corporate life of mankind, in the divine plan (as, for that matter, does each person).

[God] hath made of one blood, all nations of men for to dwell on all the face of the earth, and hath determined the times before appointed, and the bounds of their habitation; That they should seek the Lord, if haply they might feel after him, and find him (Acts 17:26–27).

No one nation is “better” than another, except in the sense of the blessings that it has received from the Creator, perhaps in measure of its obedience to His Word and fulfillment of its calling. Such blessings are not an occasion for pride, but for gratitude.

The Racism of Darwinism

The fact that Darwinian evolution is the basis of modern racism is finally being acknowledged — and even emphasized — by many modern evolutionists, after being indignantly denied for so long by older evolutionists whenever creationists would mention it. Stephen Jay Gould says, for example, speaking of the now-discredited recapitulation theory, which was long used as an argument for evolution:

This theory, often expressed by the mouthful “ontogeny recapitulates phylogeny,” held that higher animals, in their embryonic development, pass through a series of stages representing, in proper sequence, the adult forms of ancestral, lower creatures. . . . Recapitulation provided a convenient focus for the pervasive racism of white scientists.³⁶

Gould rightly pointed out that this absurd theory is now defunct, as it should be, but the strange thing is that many people still believe it. Any

36 Stephen Jay Gould, “Dr. Down’s Syndrome,” *Natural History*, vol. 89, April 1980), p. 144. The title of this article has reference to the physiologic infirmity widely known as mongolism, first described and named by Dr. Down. The idea was that the “races” had evolved as Negroid, Mongoloid, and Caucasoid, in that order, and that a mongoloid child, in his embryologic and infantile growth, had simply been arrested at that stage in his evolutionary recapitulation.

lingering doubt should have been eliminated by modern fetoscopy, which can actually monitor the fetal growth in the womb.

Fetoscopy makes it possible to observe directly the unborn child through a tiny telescope inserted through the uterine wall. . . . The development of the child — from the union of the partners' cells to birth — has been studied exhaustively. As a result, long-held beliefs have been put to rest. We now know, for instance, that man, in his prenatal stages, does not go through the complete evolution of life — from a primitive single cell to a fish-like creature to man. Today it is known that every step in the fetal developmental process is specifically human.³⁷

Nevertheless, as Gould said, this theory did provide in the 19th century “the best guide for the organization of life into sequences of higher and lower forms.” It was *not* the stratigraphic sequences, but the recapitulation theory popularized by Ernst Haeckel and the Great Chain of Being concept that gave 19th century paleontologists a system for organizing their fossils into an evolutionary series.

That the profound racism engendered by such notions persisted well into the 20th century was demonstrated in a remarkable article by Henry Fairfield Osborn, probably the leading evolutionary anthropologist of the first half of the 20th century, as well as president of the American Museum of Natural History.

If an unbiased zoologist were to descend upon the earth from Mars and study the races of man with the same impartiality as the races of fishes, birds, and mammals, he would undoubtedly divide the existing races of man into several genera and into a very large number of species and sub-species.³⁸

Note the evolutionary use of the term “race” here, a word (or concept) which never appears in the Bible, despite the specious contention of some evolutionists that racism is derived from a fundamentalist interpretation of Scripture. Osborn then continues:

This is the recognition that the genus *Homo* is subdivided into three absolutely distinct stocks, which in zoology

37 Sabine Schwabenthan, “Life Before Birth,” *Parents* (October 1979), p. 50.

38 Henry Fairfield Osborn, “The Evolution of Human Races,” *Natural History* (January/February 1926), reprinted in *Natural History*, vol. 89 (April 1980), p. 129.

would be given the rank of species, if not of genera, stocks popularly known as the Caucasian, the Mongolian, and the Negroid.

The spiritual, intellectual, moral, and physical characters which separate these three great human stocks are far more profound and ancient than those which divide the Nordic, Alpine, and Mediterranean races. In my opinion, these three primary stocks diverged from each other before the beginning of the Pleistocene or Ice Age. . . . The standard of intelligence of the average adult Negro is similar to that of the eleven-year-old youth of the species *Homo sapiens*.³⁹

Such scientifically flawed thinking reveals personal bigotry, and has led to much human misery. Thankfully, it is no longer prominent, although recently on the rise again. Modern punctuational evolutionists such as Gould have made their point that Darwinism has led to racism. They have also stressed its culpability with respect to social Darwinism (exploitative capitalism, imperialism, etc.), but this has long been acknowledged, with regrets, even by neo-Darwinists. They are not so eager to acknowledge its responsibility for Fascism and Nazism (after all, Mussolini and Hitler *did* call their movements “socialistic,” and the student movements of the 1960s bore many striking resemblances to the Hitler youth of the 1930s and early 1940s), but the connection is certainly there, as we have already shown.

Hitler believed in struggle as a Darwinian principle of human life that forced every people to try to dominate all others; without struggle they would rot and perish. . . . Even in his defeat in April 1945 Hitler expressed his faith in the survival of the stronger and declared the Slavic peoples to have proved themselves the stronger.⁴⁰

James Ferguson has also recently reminded us that the quasi-scientific evolutionary racism of the 19th century had a deadly impact on the world.

In 19th century Europe the concept of race was a preoccupation for the growing human sciences. . . . These first physical anthropologists helped to develop the concept of

³⁹ Ibid.

⁴⁰ P. Hoffman, *Hitler's Personal Security* (London: Pergamon Press, 1979), p. 264.

Aryan supremacy, which later fueled the institutional racism of Germany in the 1930s, and of South Africa today.⁴¹

Similarly, Stephen Jay Gould in another significant article has noted that evolutionary anthropologists were long convinced that the various “races” all had separate evolutionary origins and, therefore, had “evolved” to different levels of intelligence and ability during their long histories.

We cannot understand much of the history of late 19th and early 20th century anthropology, with its plethora of taxonomic names proposed for nearly every scrap of fossil bone, unless we appreciate its obsession with the identification and ranking of races.⁴²

And, since these anthropologists all were white Europeans or Americans, they were confident that the Caucasian race had advanced far above the “lower” races. Gould himself rejects racism, however, on the shaky grounds that human separation into racial subdivisions is too “recent” for significant differences to have developed:

The division of humans into modern “racial” groups is a product of our recent history. It does not predate the origin of our own species, *Homo sapiens*, and probably occurred during the last few tens (or at most hundreds) of thousands of years.⁴³

Dr. Gould, however, seems to be arguing against himself here. If the “races” have been segregated for possibly a “few hundreds of thousands of years,” then it is completely arbitrary to assume that no significant racial differences would evolve in such immense spans of time — that is, if evolution were really true. Gould’s own concept of punctuated equilibrium involves evolutionary “jerks,” which produce significant evolutionary changes in only a few generations. Evolutionism — whether the slow and gradual changes of new-Darwinism or the rapid jumps of punctuationism — is, by its very nature, racist in its implications!

In contrast, biblical creationism, with its record of the *recent* origin of all the tribes and nations after the great Flood, only a few thousand years ago, makes real “races,” in the evolutionary sense, quite impossible.

41 James Fergusson, “The Laboratory of Racism,” *New Scientist*, vol. 103 (September 27, 1984), p. 18.

42 Stephen Jay Gould, “Human Equality is a Contingent Fact of History,” *Natural History*, vol. 93 (November 1984), p. 28.

43 *Ibid.*, p. 31.

This fact, of course, correlates perfectly with the biblical teaching that there is only one race — the human race!

As noted before, the very idea of “race” is strictly an evolutionary concept, though it did not originate with Darwin. Darwin appropriated it from previous evolutionists. As far as the Bible is concerned, all people are of “one blood,” descended from Noah and his three sons in only a few thousand years, not nearly enough to develop real races in the evolutionary sense (that is, sub-species in the process of evolving into new species).

This also is a fact not known or appreciated by most Christians. All the tensions and tragedies of racial conflicts stem from racist philosophy, which is squarely based on an evolutionary view of human origins and history. R. W. Wrangham, reviewing this subject, has said:

Even if particular individuals from different populations occasionally look alike, surely the distinctions between whole populations are big enough to justify calling them racial. This was the dominant view from the mid-18th century onward. . . . Authors varied in their opinion of the number of human races, from Cuvier’s three to as many as thirty or more in the 20th century, but with few exceptions they agreed that the concept of race was sound.⁴⁴

Similarly, anthropologist Russell Tuttle, of the University of Chicago, in reviewing an article by Loring Brace, says:

Brace squarely confronts racist influences in the two chief founders of institutional physical anthropology in the United States . . . [Ales] Hrdlicka, based at the American Museum of Natural History, and E.A. Hooton, with whom most of the second generation of physical anthropologists studied at Harvard.⁴⁵

Dr. Brace (with whom one of us once had a creation/evolution debate) was, like Tuttle, a leading modern evolutionary anthropologist, at the University of Michigan. Hrdlicka and Hooton, along with Henry Fairfield Osborne, also at the American Museum of Natural History, were leading American anthropologists of the first half of the 20th century, and all were scientific racists, as Tuttle says. In fact, as noted

44 R.W. Wrangham, Book Review, *American Scientist*, vol. 72 (Jan./Feb. 1984), p. 75.

45 Russell Tuttle, “Five Decades of Anthropology,” *Science*, vol. 220 (1982), p. 832.

previously, Osborne even taught that the Negro “race” was actually a lower species than *Homo sapiens*!

However, the current generation of anthropologists, largely because of anti-racist pressures from the liberal and Marxist “left-wing” of evolutionary thought, are finally beginning to abandon the ideas of race altogether, and thus are inadvertently returning to the biblical concept. Tuttle puts it this way:

[Brace] reiterates the modern view that we should abandon the concept of race altogether and instead record the gene frequencies and traits of populations that are identified simply by their geographic localities. This genotypic and phenotypic information is to be interpreted in terms of historical and proximate selective forces.⁴⁶

R. W. Wrangham, who is on the staff of the Center for Advanced Study in the Behavioral Sciences at Stanford University, says: “The dominant view today is that race is an outmoded concept.”⁴⁷ Similarly, Gould says that: “Human variation exists; the formal designation of the races is passé.”⁴⁸

For whatever it’s worth, the senior writer of this book has been teaching and writing almost the same thing about the race concept for over 50 years, at least 25 years in advance of the modern school of anthropologists. This was not because of his personal knowledge of human genetics, which was minimal at best, but simply because this was the teaching of Scripture.

Thus, racism has depended on evolutionism for its pseudo-scientific promotion, especially Darwinism and neo-Darwinian evolutionism. Consequently, evolutionary thinking has been an integral component of social Darwinism, imperialism, and, finally, fascism and Nazism, as well as a basic underlying cause of both World War I and World War II.

This brings us to perhaps an even more important and more deadly socio-economic philosophy — that is, Marxism, with its associated Socialistic, Communistic, and anarchistic branches. This philosophy also was squarely grounded on evolutionism, though perhaps more aligned with Lamarckianism or (more recently) punctuationism, than with neo-Darwinism.

46 Russell Tuttle, “Five Decades of Anthropology,” *Science*, vol. 220 (1982), p. 832.

47 R.W. Wrangham, *American Scientist*, p. 75.

48 S.J. Gould, “Human Equality,” p. 30.

Revolutionary Evolutionism and Communism

It is well known that Communism, as practiced in the Soviet Union, Red China, Vietnam, Castroite Cuba, and other nations where it has flourished for a time, was founded on the atheistic premises of Marx, Lenin, and other Communist leaders. The supposed scientific basis of Marxism was evolutionism, though the particular form of evolutionism (Lamarckianism, Darwinism, punctuationism, pantheism) has varied with circumstances.

Marxist theory not only was based on atheism, but also urged the complete destruction of religion, especially Christianity. Religion was “the opiate of the people,” so they said, while desecrating churches and slaughtering or enslaving Christians who would not renounce their faith and, in effect, worship the state. Lenin expressed his anti-theism thus:

Every religious idea of a god, even flirting with the idea of god, is unutterable vileness of the most dangerous kind, “contagion” of the most abominable kind. Millions of sins, filthy deeds, acts of violence, and physical contagions are far less dangerous *than the subtle spiritual idea of a god.*⁴⁹

This premise, of course, not only denigrated religion, but also meant that individual men and women, being merely animals, were quite expendable if their elimination would serve the interests of “the people” as a whole (or, more realistically, the intellectual elite who had attained rule over the people as a whole).

The problem is that, by denying the possibility of a relationship between God and man, atheism also denies the possibility of a just relationship between men. . . . Human life is sacred only if there is a God to sanctify it. Otherwise man is just another collection of atoms and can be treated as such. . . . The spiritual disorder within man’s soul of which Saint James wrote has become, in the modern age, institutionalized. In other words, the moral disorder of the individual soul has become the principle of a general public disorder, first as it was articulated in the teachings of Nietzsche and Marx, and then incarnated in the Nazi regime and in the various Marxist-Leninist states today.⁵⁰

49 Vladimir Lenin, as cited in “Atheism and Arms Control,” by Robert R. Reilly, *Intercollegiate Review*, vol. 24 (Fall 1988), p. 20. Emphasis his.

50 Robert R. Reilly, *Intercollegiate Review*, p. 19.

The writings of Karl Marx have spawned a variety of liberal panaceas in the world, including various socialist schemes as well as doctrinaire communism. Even today, with Communism as practiced in Russia and eastern Europe somewhat defeated and dispersed, the teachings of Marx continue to thrive in China, Vietnam, and many other places, including many universities in western Europe, South America, and even the United States. And all are grounded in evolutionism!

All manner of liberal thinkers have appropriated Darwin to find at last a scientific foundation for the liberal belief in progress, democratic equalitarian socialism, and an altruistic ethic of human solidarity. Marx himself viewed Darwin's work as confirmation by the natural sciences of his own views, and even Mao Tse-tung regarded Darwin as presented by the German Darwinists, as the foundation of Chinese scientific socialism.⁵¹

In the early days of Russian Communism, after its harsh control over Russian society had been firmly established, Russian scientists were expected to promote evolutionism, and they did. The Russian biochemist Oparin, an ardent Marxist, was the one man most instrumental in establishing the modern dogma of the naturalistic origin of life, the view which (despite the utter lack of any scientific proof) is now almost universally taught and believed, even in the high schools of America.

As Michael Ruse, an ardent Darwinist opponent of the Marxist influence on American evolutionary thought, although himself a believer in the biochemical origin of life, has pointed out:

[Oparin] was quite open in his subscription to a Marxist-Leninist philosophy of nature, and consciously applied it to his work on the appearance of new life.⁵²

Which brings us, then, to a consideration of evolution as it was understood by the communists, the Russians in particular, for it is *this* model which seems to have captivated the hearts of the modern school of western evolutionists.

Karl Marx, of course, was a committed evolutionist *before* Darwin published *The Origin of Species*, but he was such because of his atheistic

51 George J. Stein, "Biological Science and the Roots of Nazism," *American Scientist*, vol. 76 (January/February 1988), p. 52.

52 Michael Ruse, "Biology and Values: A Fresh Look," in Barcun Marcus et al., *Logic Methodology and Philosophy of Science* (New York, NY: Elsevier Science Publications B.V., 1986), p. 456.

faith (born a Jew, he had once made a Christian confession, presumably for economic reasons, but later renounced all organized religions in favor of atheism) and his commitment to change in human history and economic systems, but he had no real scientific basis for this secular faith until Darwin came along. As is well known, Marx even wanted to dedicate *Das Kapital* to Darwin, but Darwin refused.

In spite of Marxist commitment to evolution, however, both Marx himself and later communists were always uncomfortable with the uniformitarian aspects of Darwinism. They honored Darwin because of the scientific respectability that he had given to naturalism and atheism, but they needed a more immediate mechanism for evolutionary change than the ideas of long-drawn-out progress which commended themselves to western Europe and America, the nations of which were experiencing unprecedented growth and development.

Lamarckianism was very appealing to the Communist mind, for it promised evolution through changing the environment. This could be a considerably more rapid process than the cut-and-try mechanism of natural selection. A revolutionary change imposed on the environment could produce all sorts of physical, as well as social, benefits to society, through the Lamarckian inheritability of characters produced environmentally. For a considerable time, therefore, this concept was even imposed on Russian scientists as official state dogma.

The problem, of course, was that Lamarckian evolution — unlike Darwinian conjectures and tautologies — was testable! It was, indeed, subjected to many scientific experiments, and, in spite of optimistic claims made for awhile by such Russian scientists as Kammerer, Pavlov, Lysenko, and others, it was eventually so completely falsified by tests that Lamarckianism finally had to be officially repudiated.

This did not mean, however, that Russian scientism would simply capitulate to neo-Darwinism, for this was the quasi-official dogma of western capitalism, and, besides, it acted too slowly. Communism must proceed by *revolution*, not by slow-and-gradual *evolution*! To be scientific, some form of naturalistic mechanism had to be found that would elevate systems rapidly — not gradually — to a higher state. And so, apparently, was born the complex of concepts which we have called *revolutionary evolutionism*.

Steven Stanley describes the introduction of this system of evolutionary thought to North America as follows:

The punctuational idea emerged as a more visible alternative to English-speaking paleontologists with the publication

of Eldredge (1971) and Eldredge and Gould (1972). It is both interesting and surprising that, unknown to Americans, this view had previously gained support in the paleontologic community of the Soviet Union.⁵³

Stephen J. Gould and Niles Eldredge have themselves admitted this Marxist pedigree for their theory. First, however, they present this philosophical justification:

Alternative conceptions of change have respectable pedigrees in philosophy. Hegel's dialectical laws, translated into a materialist context, have become the official "state philosophy" of many socialist nations. These laws of change are explicitly punctuational, as befits a theory of revolutionary transformation in human society.⁵⁴

These authors thus stress that Hegel's dialectical materialism, which was adopted by Marx as communist dogma, when put in the context of materialistic evolution is the state "philosophy" (read "state religion") of those nations that became communist (or "socialist").

Another geologist seemingly sympathetic to Marxist "science" has commented similarly, as follows:

The theory of dialectic materialism postulates matter as the ultimate reality, not to be questioned. . . . Evolution is more than a useful biologic concept: it is a natural law controlling the history of all phenomena.⁵⁵

That author, J.E. O'Rourke, proceeds to justify the use of circular reasoning in geologic dating and other interpretations, denying any real significance to so-called "absolute time" (so important in uniformitarian neo-Darwinism) on the basis of this materialistic premise, saying in effect that all that counts is pragmatism — that is, whether a system works out or not. Gould and Eldredge apparently believe that Marxist philosophy will work and are quite pleased to be able to replace the capitalistic system of evolution with the Marxist brand.

53 Steven M. Stanley, *Macroevolution: Pattern and Process* (San Francisco, CA: W. H. Freeman and Co., 1979), p. 36.

54 Stephen J. Gould and Niles Eldredge, "Punctuated Equilibria: The Tempo and Mode of Evolution Reconsidered," *Paleobiology*, vol. 3 (Spring 1977), p. 145.

55 J.E. O'Rourke, "Pragmatism versus Materialism in Stratigraphy," *American Journal of Science*, vol. 276 (January 1976), p. 51.

In the light of this official philosophy, it is not at all surprising that a punctuational view of speciation, much like our own, but devoid (so far as we can tell) of references to synthetic evolutionary theory and the allopatric model, has long been favored by many Russian paleontologists. It may also not be irrelevant to our personal preferences that one of us learned his Marxism, literally, at his daddy's knee.⁵⁶

Interestingly, Gould has occasionally been embarrassed by his Marxist reputation and has waffled about it somewhat. On other occasions, however (at least once when under oath), he has acknowledged that he is, indeed, a Marxist, and he is generally recognized as such by his colleagues (there are many other Marxists in the American academic world today, especially at Harvard, M.I.T., and other "prestige" schools). A recent reference to Gould in the "theoretical and discussion journal of the British Communist Party" says, however, that he is *not* a Marxist.

The most eloquent defender of scientific evolutionism, Stephen Jay Gould, is an avowedly non-Marxist radical — on the left of the scientific/political consensus, but working well and truly within it.⁵⁷

It would, no doubt, in the current situation, serve the interests of doctrinaire Marxism best for such a prominent scientific evolutionist as Gould *not* to be identified officially as a Marxist, whatever his actual beliefs may be. This article also has the following to say about evolution in general:

Aspects of evolutionism are perfectly consistent with Marxism. The explanation of the origins of humankind and of mind by purely natural forces was, and remains, as welcome to Marxists as to any other secularists. The sources of value and responsibility are not to be found in a separate mental realm or in an immortal soul, much less in the inspired words of the Bible.⁵⁸

In any case, the introduction of punctuationism into American evolutionary thinking just two decades ago has rolled almost like a tidal wave over the whole field, especially the younger generation of evolutionists, disenamored with the capitalistic establishment and seeking social

56 Gould and Eldredge, "Punctuated Equilibria," p. 146.

57 Robert M. Young, "The Darwin Debate," *Marxism Today*, vol. 26 (April 1982), p. 22.

58 *Ibid.*, p. 21.

justice and full egalitarianism not by slow evolutionary change, but by rapid and even violent change if need be! Gould and his colleagues have been lionized as leaders of this new wave of revolutionary science. Gould (as well as Carl Sagan, Carl Johanson, and other young evolutionists) are personable, intelligent, articulate, and extremely popular. Gould has been featured on the cover of *Newsweek*, named “Man-of-the-Year in Science” by *Discover*, has appeared as guest star on the “Donahue Show” and other national telecasts, and has received great adulation. Sagan (with his super-expensive *Cosmos* series on the Public Broadcasting System), Johanson (with his famous “Lucy” hominid — named after a spaced-out character in a Beatle’s song), and others have received almost as much notoriety as Gould in the feverish promotion of evolutionism by the news media in recent years.

Stephen Jay Gould is the generally acknowledged leader of this new style of evolutionism. In fact, he is probably the most articulate and influential evolutionist in today’s world. With the current decline of Communism as a world power base, he has either altered his Marxist convictions or at least is keeping them more to himself. However, as Michael Ruse has pointed out, his basic punctuationalist view of evolutionary history clearly has its roots in his (perhaps former) Marxist philosophy.

Much of Gould’s justification for his paleontological perspective comes from Marxist philosophy. . . . Gould criticized Darwinian gradualism as being just an act of faith, reflecting Darwin’s own 19th century liberal views about the virtues of gradual (as opposed to revolutionary) change. Gould, to the contrary, endorses a view which leads him to expect rapid, abrupt breaks with the past. His view of the fossil record is therefore simply his own world picture made, if not flesh, then stone.⁵⁹

In a sense, Gould is a product of the youth rebellion of the sixties. One remarkable spin-off was the development of a strong reaction against the older generation of scientists, as well as against the older generation in general. This meant, among other things, rebellion against the Darwinist doctrine of slow-and-gradual evolution in biology and against the Lyellian doctrine of uniformitarianism in geology, with the recent graduates in these fields preaching and promoting “quantum speciation”

59 Michael Ruse, “Biology and Values: A Fresh Look,” in Barcun Marcus et al., *Logic Methodology and Philosophy of Science* (New York, NY: Elsevier Science Publications B.V., 1986), p. 460.

or “punctuated evolution” in biology, and “catastrophism” and “extinctionism” in geology.

This development was partly because these younger evolutionists had recognized the *complete absence* of scientific evidence for Darwinian-type evolution which creationists had been emphasizing for so long. But it was also because the social implications of traditional Darwinism (social Darwinism, racism, Nazism, imperialism, laissez-faire capitalism) were now being repudiated in the name of left-wing evolutionism (Marxism, communism, revolutionism). Commenting on these changes as they spilled over into the field of physical anthropology, Matt Cartmill makes this observation:

When people turn indignantly from one sort of speculation to embrace another, there are usually good, non-scientific reasons for it. . . . A myth, says my dictionary, is a real fictional story that embodies the cultural ideals of a people or expresses deep, commonly felt emotions. By this definition, myths are generally good things — and the origin stories that paleoanthropologists tell are necessarily myths.⁶⁰

This recent conflict between the slow-and-gradual (Darwinian) evolutionists and the “punctuationist,” revolutionary evolutionists, with its overtones of the classic conflict between the older generation and the younger generation, as well as of that between traditional “social-Darwinist,” laissez-faire, capitalistic economics and environmentalist (neo-Lamarckian), neo-catastrophist, Marxist economics, has been quite bitter, especially in England and the United States.

The American controversy focused especially at Harvard University, where two of today’s leading evolutionists, Dr. Stephen Jay Gould and Dr. Edward O. Wilson, squared off as the spokesmen for these two opposing schools of evolutionary thought. Gould is the chief American spokesman for “punctuated equilibrium,” and Wilson for “sociobiology,” the modern equivalent of traditional neo-Darwinism. Reporting on this conflict, Dr. John Turner, reader in evolutionary genetics at the University of Leeds in England, says in a review article on this situation:

It was the turn of E.O. Wilson and Richard Dawkins to be denounced, not this time from the pulpit as atheists, but by radical movements as fascist sympathizers. A Harvard group

60 Matt Cartmill, *Natural History*, vol. 92 (November 1983), p. 77.

denounced Wilson's work as being in the intellectual tradition of Adolph Hitler.⁶¹

Richard Dawkins is well known in England as the Oxford professor who originated the "selfish gene" theory and the "blind watchmaker" euphemism for Darwinism. With reference to Gould, Turner continues with this identification:

Stephen Gould, who has repeatedly urged the need to see man as essentially different from animals, and was one of the signatories of the "Hitler" statement about E. O. Wilson, has found the answer in the punctuated equilibrium theory.⁶²

Now, Wilson and Dawkins both vigorously deny any connection with Nazism, as do their followers, but there can be little doubt that, if they were alive today, Hitler and Himmler and the Nazi theoreticians would appropriate their sociobiological arguments as further scientific support for their Nazi racist and survival-of-the-fittest philosophies. Dawkins and Wilson, of course, are both doctrinaire atheists, although Wilson testifies that he was once a Southern Baptist fundamentalist before encountering evolutionary teachings as a student at the University of Alabama.⁶³

Gould and his many followers may, as Turner says, view man as distinct from animals, but this is in a Marxist sense, not in a biblical or creationist perspective. That is, *Homo sapiens* is believed to have appeared suddenly — not by creation, but by an evolutionary jerk, as Turner calls it. Gould is as much an atheist as Wilson or Dawkins. In fact, as noted above, he has admitted to being a Marxist, not a card-carrying communist, but someone committed to the philosophy and teachings of Karl Marx, which include atheism and evolutionism as foundational.

In commenting further on this latter-day conflict between these two schools of evolutionary atheism, Turner makes the interesting admission that *neither* is based on good scientific evidence.

Of the essential jerk theory, one can say as Gould did of sociobiology, that it brings no new insights, and can cite on its behalf not a single unambiguous fact.

61 John Turner, "Why We Need Evolution by Jerks," *New Scientist*, vol. 101 (February 9, 1984), p. 34.

62 Ibid., p. 35.

63 E.O. Wilson, "Toward a Humanistic Biology," *The Humanist* (October 1982), p. 40.

The point is not that the punctuated equilibrium theory is wrong. It might be right. The point is that despite its very poor scientific foundations it is attracting an enormous amount of attention. And as the Harvard radicals so cogently argued in the case of race and IQ, when an essentially meretricious scientific theory causes such a fuss, we must look to non-scientific causes.⁶⁴

That is, both the neo-Darwinists (including sociobiologists) and the punctuationists (reflecting their Marxist tendencies) hold their views for non-scientific reasons! Once again, as we have been stressing in this book, *evolution is not science; it is always religion* in one form or another.

As bitterly opposed as they are to each other, all the sects of evolutionism unite when confronted with creationism, their common enemy. And they especially hate *scientific* creationism, even though they must realize that they have no valid scientific proof or even good evidence for either slow evolution or sudden evolution. As bitter enemies of the true God and biblical Christianity, they prefer anything — any lie — to the truth of creation.

Now, commitment to evolution is nothing new for Marxism — whether the philosophical Marxism of the textbooks or the violent communism of the revolutionaries. All Socialists, Communists, anarchists, Leninists, Stalinists, Trotskyites, Maoists, Castroites, or whatever a particular school of Marxism or a particular Marxist national revolutionary movement may be called locally — all are founded upon evolutionism (whether Darwinian, Lamarckian, or some other brand) and atheism (even when it is called humanism or pantheism or something else).

It is time — high time, late time — for Christians to become alert to the fact that creationism is the only real antidote to this left-wing ideology that in one form enslaved more than half the world and is now almost at our own gates in another form. It may not conquer the free world by revolution and military power; but even our own schools and other public institutions, by its intellectual pretensions, are all based on its atheistic, evolutionary, pseudo-scientific presuppositions.

Creationists are frequently criticized for saying that evolutionism is not merely a scientific concept but that it also has been the basis of anti-Christian social systems such as communism and socialism. Critics of creationism often express indignation when such charges are made against evolutionary theory.

64 Turner, "Why We Need Evolution by Jerks," p. 35.

No creationist, of course, ever alleges that all evolutionists are atheists or communists. There are multitudes of both theistic evolutionists and evolutionary capitalists. However, it is a simple fact that evolutionary thinking is basic in Socialism and Communism and other such systems, whatever conclusion one wishes to draw from that fact. Socialistic and Communistic writers frequently make a point of this, maintaining that the evolutionary structure proves their system to be “scientific.”

For example, the famous periodical *International Socialist Review* (which includes a monthly supplement called its “Monthly Magazine Supplement to the Militant”), in its November 1980 issue, had as its feature article a lengthy attack on creationism entitled “Evolution vs. Creationism: In Defense of Scientific Thinking,” by Cliff Conner. Although the author exhibits only a very limited knowledge of creationist arguments and cites no creationist publication, he does attempt a rather sketchy summary of evidences for evolution (including the long-discredited recapitulation theory!).

Of particular interest, however, is his concern that the creation movement may retard the advance of Marxism and Socialism. Conner stresses the importance of evolution to these systems in such assertions as the following:

Defending Darwin is nothing new for socialists. The socialist movement recognized Darwinism as an important element in its general world outlook right from the start. When Darwin published his *Origin of Species* in 1859, Karl Marx wrote a letter to Frederick Engels in which he said: “This is the book which contains the basis in natural history for our view.”

By defending Darwinism, working people strengthen their defenses against the attacks of these reactionary outfits, and prepare the way for the transformation of the social order.⁶⁵

Conner identifies himself and his colleagues as “revolutionary socialists,” whose aim is “as Marx said: not merely to interpret the world but to change it.”

The article concludes with an adulatory testimony to Darwin.

And of all those eminent researchers of the 19th century who have left us such a rich heritage of knowledge, we are

⁶⁵ Cliff Conner, “Evolution versus Creationism: In Defense of Scientific Thinking,” *International Socialist Review: Monthly Magazine Supplement to the Militant* (November 1980).

especially grateful to Charles Darwin for opening our way to an evolutionary dialectical understanding of nature.⁶⁶

We suggest as biblical creationists, therefore, that those theistic evolutionists and evolutionary capitalists who attack creationists for suggesting an affinity between evolutionism and socialism should concentrate, instead, on attacking Marxists for suggesting this same affinity! They started it!

We particularly need to be alert to the fact that the modern shift by evolutionists to punctuated equilibrium and catastrophism is not a move toward biblical creationism and flood geology, as some might have hoped. If anything, it is even more inimical (as a closer counterfeit) to true creationism than was the old-style evolutionary uniformitarianism. This new system is nothing less than a very dangerous conditioning for revolution.

The older style Darwinian evolution, postulating the slow and gradual development of new species over millions of years, is rapidly being displaced by the idea that evolution proceeds in sudden jumps or revolutions. This theory of “punctuated equilibrium,” introduced in 1972 and vigorously promoted by a vocal group of younger evolutionists under Gould’s leadership is rapidly taking over the universities and colleges — even high schools!

The similarity of this type of evolutionary theory to Marxian revolutionary theory, which advocates social and economic evolution by intervals of intense revolution, is more than coincidental. The well-known gaps in the so-called fossil record, which actually give strong support to the special creation of each basic kind of organism, have been distorted to teach catastrophic evolution instead, and this concept in turn is used to support Marxist concepts of social change. This evaluation is confirmed by one of England’s leading evolutionists, Professor L. B. Halstead, who is himself (like Gould) an atheist, but who still believes in slow and gradual evolution. Writing in the leading science journal, *Nature*, he observes:

This presents the public for the first time with the notion that there are no actual fossils directly antecedent to man . . . [as] . . . the creationists have insisted on for years.⁶⁷

⁶⁶ Ibid.

⁶⁷ L.B. Halstead, “Museum of Errors,” *Nature* (November 20, 1980), p. 280.

Halstead charges that these “saltatory [jumping] evolutionists” are politically motivated, and he calls their theory “the recipe for revolution.” He then makes an unexpected comparison:

Just as there are “scientific” creationists seeking to falsify the concept of gradual change through time in favor of catastrophism, so too there are the Marxists who for different motives are equally concerned to discredit gradualism.⁶⁸

Actually, there is *no scientific evidence* for either gradual evolution or rapid evolution. All the real facts of science conform precisely to the predictions of special creationism, exactly as taught in the Bible. Christians dare not settle for anything less than this, especially in their own Christian schools.

Now that Soviet style Communism is disintegrating in the former Soviet republics, many people in Russia, Ukraine, and other regions are turning away from atheism, and some even from evolutionism. Unfortunately, however, they are turning in even larger numbers to pantheistic evolutionism or the so-called “New Age” religions. This permits them to believe in a form of religion — specifically pantheism — while still holding fast to evolutionism. Furthermore, the New Age philosophers are also promoting a coming world revolution, and are supporting punctuationism as its scientific justification and pattern. In a sense, therefore, New-Age-ism is a modern offshoot of Marxism,⁶⁹ and this will be discussed in more detail shortly.

In the meantime, modern Darwinian evolutionists, unwilling to give up their faith in slow-and-gradual evolution, are attributing the decline and fall of Soviet Communism to the former long-term promotion of Lamarckian evolution by Russia and her satellites.

I propose that Stalin’s unyielding support of Lamarckian evolutionary theory, which he deemed consistent with Marxist socioeconomic theory, was the final cause of Soviet Communism’s collapse.⁷⁰

Although there is still a strong rearguard defense of traditional neo-Darwinism in the traditionally capitalistic countries, it also is under

68 L.B. Halstead, “Museum of Errors,” *Nature* (November 20, 1980), p. 280.

69 Richard Wurmbrand, a pastor long imprisoned in Siberia because of his Christian testimony, argues cogently that Marx was actually a Satanist. See Wurmbrand’s book *Marx and Satan* (Westchester, IL: Crossway Books, 1990).

70 David R. Hickey, “Evolution, Environment, and the Collapse of Soviet Communism,” *The Humanist* (January/February 1992), p. 34.

attack by younger evolutionists, as the cause of environmental exploitation and assorted other ills (racism, imperialism, etc.). With both Lamarckianism and Darwinism on the wane, many creationists are celebrating too soon, citing with relish the writings of such anti-Darwinists as Lovtrup, Hoyle, Denton, and others, apparently not realizing that New Age pantheistic evolutionism, which in effect they are promoting (being unwilling to accept true monotheistic creationism, as revealed in Genesis), is destined prophetically to be the religion of the coming world government of Antichrist.

Evolution and the New Age

A strange religion has been coming into prominence in recent years. Sometimes mis-called the “New Age Movement,” this phenomenon is in reality a complex of modern science and ancient paganism, featuring systems theory, computer science, and mathematical physics, along with astrology, occultism, religious mysticism, and nature worship. Ostensibly offered as a reaction against the sterile materialism of Western thought, this influential system appeals both to man’s religious nature and to his intellectual pride. Its goal is to become the world’s one religion.

Although New Agers have a form of religion, their “god” is evolution, not the true God of creation. Many of them regard the controversial priest, Teilhard de Chardin, as their spiritual father. His famous statement of faith is as follows:

[Evolution] is a general postulate to which all theories, all hypotheses, all systems must henceforward bow and which they must satisfy in order to be thinkable and true. Evolution is a light which illuminates all facts, a trajectory which all lines of thought must follow.⁷¹

The ethnic religions of the East (Hinduism, Taoism, Buddhism, Confucianism, etc.), which in large measure continue the polytheistic pantheism of the ancient pagan religions, have long espoused evolutionary views of the universe and its living things, and so they merge naturally and easily into the evolutionary framework of the New Age philosophy. It is surprising, however, to find that Julian Huxley and Theodosius Dobzhansky, the two most prominent of the western scientific neo-Darwinians, were really early proponents of this modern evolutionary

71 Cited in “Nothing in Biology Makes Sense Except in the Light of Evolution: Theodosius Dobzhansky, 1900–1975,” by Francisco Ayala, in *Journal of Heredity*, vol. 68, no. 3 (1977), p. 3.

religion. In a eulogy following Dobzhansky's death, geneticist Francisco Ayala said:

Dobzhansky was a religious man, although he apparently rejected fundamental beliefs of traditional religion, such as the existence of a personal God. . . . Dobzhansky held that in man, biological evolution has transcended itself into the realm of self-awareness and culture. He believed that mankind would eventually evolve into higher levels of harmony and creativity. He was a metaphysical optimist.⁷²

Dobzhansky himself penned the following typical New Age sentiment:

In giving rise to man, the evolutionary process has, apparently for the first and only time in the history of the Cosmos, become conscious of itself.⁷³

Sir Julian Huxley, probably the foremost evolutionist of the 20th century, and the first Director-General of UNESCO, had great plans for what he wanted to make the world's one religion.

The beliefs of this religion of evolutionary humanism are not based on revelation in the supernatural sense, but on the revelations that science and learning have given us about man and the universe. A humanist believes with full assurance that man is not alien to nature, but a part of nature, albeit a unique one. . . . His future destiny is to guide the future course of evolution on earth towards greater fulfillment, . . . the Fulfillment Society.⁷⁴

More recently, the socialist Jeremy Rifkin expressed this concept in picturesque language, as follows:

Evolution is no longer viewed as a mindless affair, quite the opposite. It is mind enlarging its domain up the chain of species.⁷⁵

72 Cited in "Nothing in Biology Makes Sense Except in the Light of Evolution: Theodosius Dobzhansky, 1900–1975," by Francisco Ayala, in *Journal of Heredity*, vol. 68, no. 3 (1977), p. 9.

73 Theodosius Dobzhansky, "Changing Man," *Science*, vol. 155 (January 27, 1967), p. 409.

74 Julian Huxley, "The Coming New Religion of Humanism," *The Humanist* (January/February 1962).

75 Jeremy Rifkin, *Algeny* (New York, NY: Viking Press, 1983), p. 188.

In this way one eventually ends up with the idea of the universe as a mind that oversees, orchestrates, and gives order and structure to all things.⁷⁶

Lest anyone misunderstand, this universal mind is not intended to represent the God of the Bible at all. Harvard University's Nobel prize-winning biologist George Wald, who used to state that he didn't even like to use the word "God" in a sentence, has come to realize that the complex organization of the universe cannot be due to chance, and so has become an advocate of this modernized form of pantheism. He maintains:

There are two major problems rooted in science, but unassimilable as science, consciousness and cosmology. . . . The universe wants to be known. Did the universe come about to play its role to empty benches?⁷⁷

Modern physicists have played a key role in the recent popularization of evolutionary pantheism, with what they have called the "anthropic principle."

At least the anthropic principle suggests connections between the existence of man and aspects of physics that one might have thought would have little bearing on biology. In its strongest form the principle might reveal that the universe we live in is the only conceivable universe in which intelligent life could exist.⁷⁸

This remarkable compatibility of the universe with its human occupants is not accepted as a testimony to divine design, however, but as a deterministic outcome of the "cosmic mind." The anthropic principle is emphasized in a quasi-official "New Age" publication as follows:

Given the facts, our existence seems quite improbable — more miraculous, perhaps, than the seven-day wonder of Genesis. As physicist Freeman Dyson of the Institute for Advanced Study in Princeton, New Jersey, once remarked, "The universe in some sense must have known we were coming."⁷⁹

76 Ibid., p. 195.

77 George Wald, as reported in "A Knowing Universe Seeking to be Known," by Dietrick E. Thomsen, *Science News*, vol. 123 (February 19, 1983), p. 124.

78 George Gale, "The Anthropic Principle," *Scientific American*, vol. 245 (December 1981), p. 154.

79 Judith Hooper, "Perfect Timing," *New Age Journal*, vol. 11 (December 1985), p. 18.

Prior to these modern developments, Sir Julian Huxley, arguably the leading architect of the neo-Darwinian system, had written an influential book called *Religion without Revelation*, and had become, with John Dewey, a chief founder of the American Humanist Association. As first Director-General of UNESCO, he formulated the principles of what he hoped would soon become the official religion of the world:

Thus, the general philosophy of UNESCO should, it seems, be a scientific world humanism, global in extent and evolutionary in background.⁸⁰

The unifying of traditions into a single common pool of experience, awareness and purpose is the necessary prerequisite for further major progress in human evolution. Accordingly, although political unification in some sort of world government will be required for the definitive attainment of this state, unification in the things of the mind is not only necessary also, but it can pave the way for other types of unification.⁸¹

The neo-Darwinian religionists (Huxley, Dobzhansky, Dewey, etc.) thought that evolutionary gradualism would become the basis for the coming world humanistic religion. Evolutionists of the new generation, on the other hand, have increasingly turned to punctuationism — or revolutionary evolutionism — as the favored rationale, largely because of the scientific fallacies in gradualism increasingly exposed by creationists. This development has facilitated the amalgamation of Western scientism with Eastern mysticism.

The new systems biology shows that fluctuations are crucial in the dynamics of self-organization. They are the basis of order in the living world: ordered structures arise from rhythmic patterns. . . . The idea of fluctuations as the basis of order . . . is one of the major themes in all Taoist texts. The mutual interdependence of all aspects of reality and the non-linear nature of its interconnections are emphasized throughout Eastern mysticism.⁸²

80 Julian Huxley, "A New World Vision," *The Humanist*, vol. 39, (March/April 1979), p. 35.

81 Ibid. This paper was kept "in-house" by UNESCO for about 30 years, before *The Humanist* was allowed to publish it.

82 Fritjof Capra, "The Dance of Life," *Science Digest*, vol. 90 (April 1982), p. 33.

The author quoted here, Dr. Fritjof Capra, at the University of California (Berkeley), is one of the New Age movement's main scientific theoreticians, particularly in the application of modern computerized networking and systems analysis to the study of past and future evolution, also appropriating the unscientific idea of "order through chaos," an ancient pagan notion reintroduced to modern thought by Ilya Prigogine.

The incorporation of Eastern religious evolutionism into Western evolutionary thought was greatly facilitated also by the "Aquarian Age" emphasis of the student revolution of the sixties. Not all of the scientific "New Agers" accept the astrological and occult aspects of the movement, but even these features are becoming more prominent and intellectually acceptable with the growth of its pantheistic dimensions. John Allegro makes the following ominous prediction:

It may be that, despite our rightly prized rationality, religion still offers man his best chance of survival. . . . If so, it must be a faith that offers something more than a formal assent to highly speculative dogma about the nature of a god and his divine purpose in creation; it must promise its adherents a living relationship that answers man's individual needs within a formal structure of communal worship. . . . Historically, the cult of the Earth Mother, the ancient religion of the witches, has probably come nearest to fulfilling this role, and being sexually oriented has been especially concerned with this most disturbing and potentially disruptive element in man's biological constitution.⁸³

A brilliant modern scientist with a Ph.D. in cell biology from Cambridge, with further studies at Harvard, has discussed the Gaia concept (*Gaia* was the supposed Greek goddess of the earth, essentially equivalent to Mother Earth) as follows:

Thus through Darwin's theory, nature took on the creative powers of the Great Mother, powers quite unsuspected in the original mechanistic conception of nature. Evolutionary philosophers conceived of these powers in a variety of ways. In the dialectical materialism of Marx and Engels, the creative mother principle is matter, undergoing a

83 John M. Allegro, "Divine Discontent," *American Atheist*, vol. 28 (September 1986), p. 30.

continual spontaneous process of development, resolving conflicts and contradictions in successive syntheses. In the philosophy of Herbert Spencer, progressive evolution itself was the supreme principle of the entire universe. The vitalist philosopher Henri Bergson attributed the creativity of evolution to a vital impetus, the *elan vital*. In his view, the evolutionary process is not designed and planned in advance in the mind of a transcendent God, but is spontaneous and creative.⁸⁴

“Gaia,” the religion of the Earth Mother — Mother Nature — is essentially ancient pantheism. It is now returning, even in “Christian lands,” in all its demonic power! When combined with the pervasive controls made possible by modern computerized systems technology, the global goals of evolutionary humanism seem very imminent indeed. Jeremy Rifkin considers them to be inevitable.

We no longer feel ourselves to be guests in someone else’s home and therefore obliged to make our behavior conform with a set of pre-existing cosmic rules. It is our creation now. We make the rules. We establish the parameters of reality. We create the world, and because we do, we no longer feel beholden to outside forces. We no longer have to justify our behavior, for we are now the architects of the universe. We are responsible to nothing outside ourselves, for we are the kingdom, the power, and the glory forever and ever.⁸⁵

Rifkin, though certain this is the world’s future, is, nevertheless, despondent. He closes his book with these words of despair:

Our future is secured. The cosmos wails.⁸⁶

New Age evolutionism is not so new, after all, and Mother Nature is really nothing but one of the many faces of ancient Babylon, the “Mother of Harlots” (Rev. 17:5), the age-old religion of God’s ancient enemy, Satan, “which deceiveth the whole world” (Rev. 12:9).

Scientifically speaking, New Age evolutionism, with its absurd ideas of order through chaos and quantum speciations, is even less defensible

84 Rupert Sheldrake, *The Rebirth of Nature: The Greening of Science and of God* (New York, NY: Bantam Books, 1991), p. 71.

85 Jeremy Rifkin, *Algeny*, p. 244.

86 Ibid., p. 255.

than Darwinian gradualism. Biblically speaking, evolutionism in any form is false. "For in six days the Lord made heaven and earth, the sea, and all that in them is" (Exod. 20:11). Instead of a wailing cosmos, "the heavens declare the glory of God, and the firmament sheweth his handiwork" (Ps. 19:1). The real "new age" will come when Christ returns!

Few people today seem to realize that evolutionism has been around ever since Satan's fall. In ancient religious systems, it was commonly incorporated with pantheism, the belief that nature itself, or the cosmos, is "god." The cosmos (space and time and primeval matter) is the "creator" of all things; there is no personal transcendent God of creation such as revealed in the Bible.

Ever since Darwin, the concept of natural selection has dominated evolutionary thought, providing a "naturalistic" explanation for the origin of species, and thus (as Julian Huxley used to say) eliminating the need for God. In recent years, the strong reaction against Darwinian evolution in many places has caused these scientists to turn to pre-Darwinian evolutionism. That is, they are abandoning atheistic evolution and returning to pantheistic evolution, the pseudo-scientific rationale underlying the New Age movement.

Dr. Stanley Jaki, with doctorates in both physics and theology and author of 32 books, confirms the universality of ancient pagan evolutionism:

All of these ancients were pagan. The essence of paganism, old and new, is that the universe is eternal, that its motions are without beginning and without end. Belief in creation out of nothing is the very opposite of paganism.⁸⁷

As far as the post-Flood world is concerned, this pagan evolutionism originated in ancient Babylon, in the land of Sumer, but then spread around the world with the dispersion, as described in Genesis 11. It came to full flower in Greece, especially through the writings of Homer and Hesiod.

The earth itself was known as the mother of all living things. The Greek goddess of the earth, Gaia (with equivalent names in other ethnic religions), soon became recognized as "Mother Earth" or "Mother Nature."

87 Stanley L. Jaki, "Science: Western or What?" *Intercollegiate Review*, vol. 26 (Fall 1990), p. 8.

How did we reach our present secular humanist world? In times that are ancient by human measure, as far back as the earliest artifacts can be found, it seems that the Earth was worshipped as a goddess and believed to be alive. The myth of the great Mother is part of most early religions.⁸⁸

The author cited above is a brilliant scientist and is one of the leaders in developing the modern “Gaian Hypothesis,” which views the earth as an actual living organism, evolving itself while controlling the geological evolution of its crust and the biological evolution of its plants and animals.

The evolution of the species and the evolution of their environment are tightly coupled together as a single and inseparable process.⁸⁹

Lovelock and other leading Gaians do not think of Gaia as a real woman living on Mount Olympus or somewhere, but as a living, intelligent “being,” comprising the earth and all its evolving organisms and other systems. Neither Lovelock nor his followers think of Gaia as an actual personal “goddess,” or anything of the sort:

In no way do I see Gaia as a sentient being, a surrogate God. To me Gaia is alive and part of the ineffable Universe and I am a part of her.⁹⁰

Another distinguished scientist advocating evolutionary pantheism is Rupert Sheldrake with a Ph.D. from Cambridge University, and later director of studies in cell biology there.

But today, with the rise of the green movement, Mother Nature is reasserting herself, whether we like it or not. In particular, the acknowledgment that our planet is a living organism, Gaia, Mother Earth, strikes a responsive chord in millions of people.⁹¹

As Dr. Sheldrake indicates, the modern “green movement,” which is rapidly growing all over the world, is largely committed to this concept

88 James Lovelock, *The Ages of Gaia* (New York, NY: W. W. Norton and Co., 1988), p. 208.

89 Ibid., p. 12.

90 Ibid., p. 218.

91 Sheldrake, *The Rebirth of Nature*, p. 10.

of pantheistic evolution. In fact, the environmental activists in politics, both local and national, are also strongly influenced by such ideas.

Lovelock's musings have had two consequences. They inspired a quasi-political movement based in London, complete with a publishing arm, that now includes thousands of adherents throughout the U.S. and Western Europe: it appeals naturally to scientifically innocent individuals who worry about the environment.⁹²

Sheldrake is careful to point out also that this New-Age evolutionary pantheism is essentially a revival of the ancient religions.

Although there was much debate over the details, animism was central to Greek thinking. The great philosophers believed that the world of nature was alive because of its ceaseless motion. Moreover, because these motions were regular and orderly, they said that the world of nature was not only alive but intelligent, a vast animal with a soul and a rational mind of its own.⁹³

The effect of evolutionism on the environmental movement and related topics will be discussed in the next chapter. In the meantime, it has become compellingly evident that the tree of evolution has borne an abundance of corrupt fruit, in both theory and practice, and Christians should never partake of it.

This pantheistic theme is being continually emphasized in public school classrooms today. The nation even elected in 1992 a vice president whose best-selling book, *Earth in the Balance: Ecology and the Human Spirit*, was passionately devoted to such concepts.⁹⁴

The worship of "Mother Earth" is also becoming prominent in some aspects of the modern feminist movement. The more radical feminists, in fact, are replacing God with "the Goddess," even holding worship services in "her" name. In fact, Vice President Al Gore, on page 260 of his book, cites with approval the statement that "the prevailing ideology of belief in prehistoric Europe and much of the world was based on the worship of a single earth goddess," lamenting the fact that "organized goddess worship was eliminated by Christianity."⁹⁵

92 Tim Beardsley, "Gaia," *Scientific American*, vol. 261 (December 1989), p. 35.

93 Sheldrake, *The Rebirth of Nature*, p. 44.

94 Al Gore, *Earth in the Balance: Ecology and the Human Spirit* (1992).

95 Ibid., p. 260.

In fact, the idea of pantheistic evolution is not even limited to that of Earth and its systems. Modern New Agers embrace the whole universe in some form of conscious cosmic evolution. The famous astronomer Fred Hoyle, in fact, has written an entire book⁹⁶ rejecting terrestrial Darwin-type evolution, in favor of cosmic pantheistic evolution. Another British astronomer and physicist, Paul Davies, thinks that modern notions of “order from chaos” somehow prove that the “creative cosmos” has created itself.

In recent years, more scientists have come to recognize that matter and energy possess an innate ability to self-organize.⁹⁷

Then, continuing, Davies presumably proves this merely by citing the following:

The astonishing ability of an embryo to develop from a single strand of DNA, via an exquisitely well-organized sequence of formative steps, into an exceedingly complex organism.⁹⁸

Dr. Davies neglects to explain, however, just *how* the DNA was ever programmed to do this. Perhaps Mother Nature did it! In any case, this is exactly what more and more scientists believe today.

All nature is evolutionary. The cosmos is like a great developing organism, and evolutionary creativity is inherent in nature herself.⁹⁹

But that is not all.

The universe as a whole is a developing organism, and so are the galaxies, solar systems, and biospheres within it, including the earth.¹⁰⁰

It is not necessary to discuss this further here, but the fact is that there is no more scientific proof (or even real evidence) for *pantheistic* evolution than there is for *atheistic* evolution. Evolution in any form is nothing but “cunningly devised fables” and “science falsely so-called.”¹⁰¹

⁹⁶ Fred Hoyle, *The Intelligent Universe* (London: Michael Joseph Co., 1983).

⁹⁷ Paul Davies, “The Creative Cosmos,” *New Scientist*, vol. 116 (December 17, 1987), p. 42.

⁹⁸ *Ibid.*

⁹⁹ Sheldrake, *op. cit.*, p. 95.

¹⁰⁰ *Ibid.*, p. 151.

¹⁰¹ 2 Peter 1:16; 1 Timothy 6:20.

The Catholic physicist, Dr. Wolfgang Smith, has said:

The point, however, is that the doctrine of evolution has swept the world, not on the strength of its scientific merits, but precisely in its capacity as a Gnostic myth. It affirms, in effect, that living beings created themselves, which is, in essence, a metaphysical claim. . . . Thus, in the final analysis, evolutionism is in truth a metaphysical doctrine decked out in scientific garb.¹⁰²

Just as pantheistic evolution served as the world's religion in the early days, so it will do again in the last days. The New Age is really nothing but a revival in modern garb of the Old Age — that is, the first age after the Flood, when King Nimrod led the world in a united rebellion against the Creator (Gen. 10:8–12; 11:1–9). And just as all the groups in the wide spectrum of New Age beliefs are founded upon a base of pantheistic evolutionism, so all have as their ultimate goal, just as Nimrod did, the development of a global system of government, culture, finance, and religion. The United Nations Organization is currently the focus of these plans, but it will eventually “evolve” into a much stronger international government, in which all “the kings of the earth [will] set themselves, and the rulers take counsel together, against the Lord, and against his [Christ], saying, Let us break their bands asunder, and cast away their cords from us” (Ps. 2:2, 3).

To accomplish this, the evolutionary pantheists must first teach men once again (as they did in ancient time) to change “the glory of the uncorruptible God into an image made like to corruptible man,” and then to “[worship] and [serve] the creature more than the Creator” (Rom. 1:23, 25). Robert Muller, former Assistant Secretary General of the United Nations (presumably speaking on behalf of that organization) has expressed their hope thus:

I believe the most fundamental thing we can do today is to believe in evolution.¹⁰³

Now, if the most fundamental thing that New Agers (as well as the older-style secular humanists and social Darwinists) can do to bring about such a world system is to believe in evolution, that means the most

102 Wolfgang Smith, *Teilhardism and the New Religion* (Rockford, IL: Tan Books and Publishers, 1988), p. 242.

103 Robert Muller, as cited in “United Nations’ Robert Muller — a Vistion of Global Spirituality,” by Kristin Murphy, *The Movement Newspaper* (September 1983), p. 10.

effective thing the remnant of believers in God and His Word can do to offset this is to believe and teach a soundly biblical and scientific creationism. This must include the great truth that the Creator has now also become the Lamb of God, our sin-forgiving Savior, and soon will return as eternal King.

In that day, “These shall make war with the Lamb, and the Lamb shall overcome them: for he is Lord of lords, and King of kings” (Rev. 17:14).

Chapter 5

Evolution Everywhere

We have now seen the pervasiveness of evolutionary philosophy in every field of study, as well as its long, long history as the basic weapon in Satan's warfare against his Creator. We have also noted that evolutionism has been used as the pseudo-scientific justification for almost every deadly philosophy and every evil practice known to man. In this chapter, the impact of the creation/evolution issue on a variety of current social problems will be reviewed.

Many of these current problems seem to be closely associated with the New Age movement and its revival of ancient pantheistic evolutionism, as just discussed in the preceding chapter. Perhaps the most visible and abrasive of these current problems is what has been variously called the ecological crisis, the environmental movement or the Green Party. As we shall see, however, to the extent that there is an environmental crisis, it has been brought about by evolutionists, not by biblical Christians, as some have alleged.

Creation, Evolution, and Ecology

The essence of evolutionism was expressed by Charles Darwin in the very last paragraph of his *Origin of Species* as follows:

Thus, from the war of nature, from famine and death, the most exalted object which we are capable of conceiving, the production of the higher animals, directly follows.¹

The struggle for existence, with elimination of the weak and unfit, leads to survival of the fittest, so this war of nature must eventually lead to higher animals, higher races, and finally to higher civilizations. Or so

¹ Charles Darwin, *Origin of Species*, all editions, final paragraph.

goes the rationale for Social Darwinism, as exploited especially by Darwin's disciples in the century following the publication of his book.

Among other harmful results of this philosophy has been the thoughtless exploitation of our natural resources during the past century — mineral, animal, and human resources — all in the name of socio-economic evolution.

Great mineral and timber resources have been wastefully misused, and many plant and animal species have become extinct, in many cases because of careless human activities. It has been estimated by Myers that at least 1,000 species are becoming extinct every year. Then he adds this warning:

If current land-use patterns and environment-destruction patterns persist (and many are likely to accelerate), the extinction rate could surely rise by the year 2000 to an average of 100 species per day.²

Evolutionists have tried to blame this ecological catastrophe on biblical creationism, even though the real cause was the attitude of Social Darwinism that prevailed during the post-Darwin century. In a widely quoted article, "The Historical Roots of our Ecologic Crisis," historian Lynn White charges, for example, that the Christian concept of a transcendent God has been used to justify this insensitivity to nature. In his last paragraph, White summarizes his argument as follows:

Both our present science and our present technology are so tinctured with orthodox Christian arrogance toward nature that no solution for our ecologic crisis can be expected from them alone. Since the roots of our trouble are so largely religious, the remedy must also be essentially religious, whether we call it that or not. We must re-think and re-feel our nature and destiny.³

The religion that White and most modern environmentalists advocate, is some form of pantheism. Pantheism is also based on evolution, of course, but it is a different kind of evolution than Darwinism. Most New Agers are opposed to Darwinism, because they recognize the folly of its pseudoscience and the cruelty of its motivations. But they are evolutionists

2 Norman Myers, "Extinction Rates Past and Present," *Bioscience*, vol. 39 (January 1989), p. 39.

3 Lynn White, "The Historical Roots of our Ecologic Crisis," *Science*, vol. 155 (March 10, 1967), p. 1207.

nonetheless, bitterly opposed to the Creator God of the Bible. Instead, they “worship and serve the creature more than the Creator” (Rom. 1:25).

They are wrong, however, in attributing our “ecologic crisis” to the Creator and His “dominion mandate,” even though there are, no doubt, some Christians who have indeed been insensitive to nature. In fact, many of the “Social Darwinists” of the 19th and 20th centuries were “theistic” evolutionists, and were so enamored of the idea of “evolutionary progress,” that they worked diligently to harmonize the Bible with that post-Darwinian system.

This was impossible, of course, for the Bible is clearly opposed to *any* form of evolutionism — atheistic, theistic, or pantheistic. The Bible certainly does not condone human cruelty to animals or even to plant life, but it also condemns all forms of nature worship.

Christians today are under many pressures to compromise, either with Darwinian evolutionism on the one hand, or pantheistic (New Age) evolutionism on the other. It is more important than ever, therefore, for us to try to understand the full implications of our relation to God’s creation, as well as our personal relation to Him as our Creator and Redeemer.

After God had finished creating all other things, He created man and woman and gave them “dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth” (Gen. 1:26). This “dominion mandate” thus makes a clear distinction between mankind and all the rest of creation, for only men and women were created “in the image of God” (Gen. 1:27), and were given control “over all the earth.” This dominion, however, was not to be a totalitarian despotism, but a stewardship under God, man being responsible to God for its care, “for the earth is the Lord’s, and the fulness thereof” (Ps. 24:1).

And God *does care* for His creation; He is not capricious. He is omniscient and omnipotent and has a divine purpose in everything that He created. Before sin and death came into the world, God placed Adam in the Garden of Eden and told him “to dress it and to keep it” (Gen. 2:15). Then, he and Eve were told later that they were to “be fruitful, and multiply, and replenish [i.e., ‘fill’] the earth, and subdue it” (Gen. 1:28). The clear implication was that as the population expanded to fill the earth, man’s descendants were to “dress and keep” their own respective parts of the earth, just as Adam was to care for his. The work of subduing the earth would involve learning to understand all its processes and all its creatures, for the benefit of mankind and for the glory of God.

This mandate is still in effect today. It applies to all descendants of Adam and Eve, but is even more important for Christians, because we who have been saved have come to know the Lord not only in His work as the world's Creator, but also in His work as the world's Redeemer.

In exercising his dominion over the earth, man has the right to eat of its fruits and herbs (Gen. 1:29) and also the flesh of animals. "For every creature of God is good, and nothing to be refused, if it be received with thanksgiving" (1 Tim. 4:4). Even God, appearing to Abraham in human form, ate of "a calf, tender and good," along with "butter and milk" (Gen. 18:1, 7–8), and Jesus ate of the Passover lamb with His disciples (Luke 22:7–8).

The skins of animals may also be used to make human clothing. John the Baptist, the greatest man ever born of woman, according to Christ, filled with the Holy Spirit from his mother's womb (Matt. 11:11; Luke 1:15), "was clothed with camel's hair, and with a girdle of a skin about his loins" (Mark 1:6). God himself set the pattern after Adam and Eve had sinned, for unto them "did the Lord God make coats of skins, and clothed them" (Gen. 3:21).

Animals were also used, with God's approval, for transportation (Jesus rode into Jerusalem on an ass's colt, for example), to serve as beasts of burden, and as sacrifices for sin. Trees were felled for construction and for firewood, and designated areas (e.g., the valley of Hinnom) were used for refuse disposal. All such uses of the earth and its creatures are evidently recognized by God as necessary and proper in connection with His purposes for man in this present world.

At the same time, we must never forget that we are stewards of God's created world and that He cares deeply for it. "[He] hath measured the waters in the hollow of his hand, and meted out heaven with the span, and comprehended the dust of the earth in a measure, and weighed the mountains in scales, and the hills in a balance" (Isa. 40:12).

Although His greatest provisions are for men and women, He also provides for animals, and even for the land itself, "to cause it to rain on the earth, where no man is; on the wilderness, wherein there is no man; to satisfy the desolate and waste ground; and to cause the bud of the tender herb to spring forth" (Job 38:26–27). "He sendeth the springs into the valleys, which run among the hills. They give drink to every beast of the field: . . . By them shall the fowls of the heaven have their habitation, which sing among the branches. . . . He causeth the grass to grow for the cattle. . . . So is this great and wide sea, wherein are things creeping innumerable. . . . These wait all upon Thee, that Thou mayest give them

their meat in due season. . . . They are filled with good” (Ps. 104: 10–12, 14, 25, 27–28). If God is that careful to provide for His creatures, we as His stewards thereof should also care for them.

The creation also provides wonderful instruction for us. The waters speak of life, the fires of judgment, the trees of strength, the vineyards of spiritual fruit. The ants teach industry and the eagles of mounting up toward God. “But ask now the beasts, and they shall teach thee; and the fowls of the air, and they shall tell thee; Or speak to the earth, and it shall teach thee; and the fishes of the sea shall declare unto thee. Who knoweth not in all these that the hand of the Lord hath wrought this?” (Job 12:7–10).

Furthermore, God does not take death lightly, either human death or animal death. Jesus said, “Are not two sparrows sold for a farthing? and one of them shall not fall on the ground without your Father” (Matt. 10:29).

Nor does God condone mistreatment of animals. “For the Scripture saith, Thou shalt not muzzle the ox that treadeth out the corn” (1 Tim. 5:18). God on one occasion even miraculously allowed an animal to protest verbally to its master about its beatings (Num. 22:28). God did not allow His people to “seethe a kid in his mother’s milk” (Exod. 23:19), even though the meat of the animal could be eaten by them. He ordained a weekly rest for animals as well as for people. “The seventh day is the sabbath [i.e., ‘rest’] of the Lord thy God: in it thou shalt not do any work . . . nor thy cattle” (Exod. 20:10). He likewise commanded even a sabbatical year of rest for agricultural lands (Lev. 25:3–4).

God lovingly takes care of His creation, and so should we, as His stewards. But we must not worship it, nor consider “nature” as our “Mother Nature.” We have not come by evolutionary descent from the animals (or from hydrogen gas!) as the naturalists assert, nor do we have any evolutionary kinship with the animals, as the pantheists teach.

Therefore, every problem of an ecological and environmental nature must be carefully considered in the light of all these truths. There are many such problems: air pollution, water pollution, deforestation, suburban development, agricultural pesticides, toxic wastes, coal mining, animal experimentation, and on and on. The laissez-faire evolutionist may want freedom to spoil the environment unhindered, and the “green-movement” pantheistic evolutionist may want such uses halted altogether, but the will of God should always be the deciding factor.

His will obviously involves an optimum balance between human needs on the one hand, and maintenance of the pristine ecology on the other. Such an optimum balance is rarely perfectly achieved, but this should be man’s goal.

Both those who “destroy the earth” (Rev. 11:18), on the one hand, and also those who “worship and serve the creature” (Rom. 1:25), on the other, are under the condemnation of God. Nature is not our “Mother,” and Time is not our “Father.” All men are the offspring of God by creation (Acts 17:28–29), and redeemed men are the children of God by regeneration through faith in Christ (Gal. 3:26). May God help all of us who know Christ as Creator and Savior to honor His creation as well.

It is still true, of course, that one of man’s most vexing problems today is the tension between the growing need for energy resources and preserving the natural environment, or — putting it another way — between conservation of a standard of living and conservation of nature.

As with all great issues, the way in which a person views a problem and the course of action that he follows in handling it depend fundamentally upon his basic philosophy of life. The ecological crisis, in particular, points up the evolution-creation conflict in a surprising light.

In the first place, the ecological relationships that exist in nature between groups of organisms and their respective environments, or “ecological niches,” would seem to indicate an origin by intelligent forethought and planning, not random struggle between populations. The innumerable and remarkable “adaptations” of this sort are very difficult to “explain” in evolutionist terms. Two of the world’s leading biological students of ecology pointed this out early in the modern ecology movement.

Some biologists claim that an understanding of the evolutionary history of organisms is prerequisite to any comprehension of ecology. We believe that this notion is having the effect of sheltering large areas of population biology from the benefits of rigorous thought. . . . Indeed, since the level of speculation rather than investigation is inevitably high in phylogenetic studies of any kind, a preoccupation with the largely unknown past can be shown to be a positive hindrance to progress.⁴

Therefore, a supposed understanding of evolution is of no value in understanding ecology, and its theories are even harmful to a true understanding of modern ecological relationships. Evolutionary ideas concerning these matters, furthermore, are based on theory, not on fact.

⁴ Paul R. Ehrlich and L.C. Birch, “Evolutionary History and Population Biology,” *Nature*, vol. 214 (April 22, 1967), p. 349.

Indeed, we know nothing whatever of the antecedents of most species for thousands of years. Perhaps these dismal facts account for some of the strangely unsatisfying “explanations” of the evolutionary ecologists.⁵

Since evolution provides no satisfactory explanation of present ecological relationships, it obviously can provide no guidance for future policies on environmental problems. Creationism, however, provides better solutions as to both past developments and future guidelines.

But evolutionists have for many years been propagating the absurd notion that man’s exploitation of the world’s resources has been based on the supposed biblical teaching that those resources had been made strictly for this exhaustive purpose. The Bible, however, teaches no such thing. If there is to be any placing of blame for the problem of pollution and related ills, it should be assigned to the philosophy of evolution, where it really belongs! Furthermore, effective remedies for such problems can be found only in the context of a sound creationist philosophy.

The essence of naturalistic evolution, of course, is randomness. The evolutionary process supposedly began with random particles, and has continued by random aggregations of matter and then random mutations of genes. The fossil record, as interpreted by evolutionists, is said by them to indicate eons of purposeless evolutionary meanderings, the senseless struggling and dying of untold billions of animals, extinctions of species, misfits, blind alleys. The present-day environmental-ecologic complex then is nothing more than the current stage in this unending *random* struggle for existence.

In recent years, Stephen Jay Gould (probably America’s leading evolutionist at present) has insistently pointed out that there is no pattern of “progress” in evolution, no directing program. Everything, including man himself, is merely an accident.

Nonetheless, contemporary science has massively substituted notions of indeterminacy, historical contingency, chaos and punctuation for previous convictions about gradual, progressive, predictable determinism.⁶

Humans arose, rather, as a fortuitous and contingent outcome of thousands of linked events, any one of which could

5 Ibid., p. 351.

6 Stephen Jay Gould and Niles Eldredge, “Punctuated Equilibrium Comes of Age,” *Nature*, vol. 366 (November 18, 1993), p. 227.

have occurred differently and sent history on an alternate pathway that would not have led to consciousness.⁷

Those populations of organisms that have survived to this point, therefore, must somehow represent the “fittest” — those that have been screened and preserved by accident and the process of natural selection. In spite of its randomness, therefore, evolutionists believe that the net result of evolution has somehow been the development of complex kinds, and finally of man himself.

This development is believed by most evolutionists to have been made possible by a peculiar combination of small populations, changing environments, and accelerated mutational pressures (Gould would add natural catastrophic extinctions), a combination which supposedly enables natural selection to function in its remarkable role as “creator” of new and perhaps better kinds of populations.

It might seem, therefore, that anything that would change the environment today (for example, by altering the chemical components of the atmosphere and hydrosphere through pollution), decrease populations (perhaps by war, famine, or pestilence), or increase mutational pressures (such as by increasing the radioactive component of the biosphere through nuclear testing), would contribute positively to further evolution and, therefore, should be encouraged — at least if the Gould school of thought is correct in its understanding of evolutionary mechanisms. In other words, the very processes which modern ecologists most deplore today, are those which they believe to have been the cause of the upward evolution of the biosphere in the past. The tongue-in-cheek conclusion would seem to be that evolution *requires* pollution!

More directly to the point, however, three generations of evolutionary teaching have had the pragmatic result of inducing in man an almost universal self-centeredness. God, if He exists at all, is pushed so far back in time and so far out in space that men no longer are concerned about responsibility to Him. As far as other people are concerned, doesn't nature itself teach that we must struggle and compete for survival? Self-preservation is nature's first law. Race must compete against race, nation against nation, class against class, young against old, poor against rich, man against man. All this is part of the natural — savage, brutal, bloody — struggle.

Two thousand years of Christian teaching linger on to some extent, in modern social concerns and in the diluted esthetics and ethics of our

7 Stephen Jay Gould, “The Evolution of Life on Earth,” *Scientific American*, vol. 271 (October 1994), p. 86.

day, but these are easily forgotten when one's self-interests are at stake. Conservationist groups may inveigh against the ecological destruction wrought by the oil and utilities industries, but they do not personally wish to give up their automobiles or electrical appliances, nor to pay the higher prices required if these commodities are to be produced without damage to the environment.

Furthermore, during the past 150 years especially, the very exploitation of nature — its flora and fauna, its resources, and even its human populations — against which environmentalists are protesting, has itself been carried out in the name of science and of evolutionary philosophy (e.g., Social Darwinism). Thus, the modern ecologic crisis is not a product of biblical theology at all, but, rather, of a century of worldwide evolutionary thinking and practice. It is significant that all these environmental problems developed almost entirely within the period when the scientific and industrial establishments were totally committed to an evolutionary philosophy!

Recognition of the world as God's direct creation, on the other hand, should transform man's outlook on nature and his attitude toward other men. The creation is God's unique handiwork and displays His character and glory (Ps. 19:1; Ps. 148; Rev. 5:13). The design and implementation of this marvelous universe and its varied inhabitants were to God a source of great delight (Gen. 1:31; Job 38:4–7; Rev. 4:11). Man was created, not to exploit God's world, but to be His steward, exercising dominion over or maintaining it (Gen. 1:26–28) and “keeping” it (Gen. 2:15).

The primeval world as it came from God's hand was beautiful beyond imagination and perfect in every way as man's home. There was ample food for both man and animals (Gen. 1:29, 30), and each kind had its own ecological niche. Even when God stopped creating (Gen. 2:1–3), He provided abundantly for the maintenance of the creation (Neh. 9:6; Heb. 1:3).

With man's fall and God's curse on his dominion, this pristine perfection radically changed (Gen. 3:17; Rom. 8:20, 22). Every process, henceforth, operated inefficiently, and every system tended toward disintegration. Although the earth's resources remained constant in quantity, their quality could thereafter be maintained only with great difficulty, and only at the cost of drawing excess energy from some other source, and usually requiring extensive human effort!

Not only was the quantity of matter and energy originally intended to be “conserved” (as expressed formally now in our scientific law of conservation of energy), but presumably also the “quality” of energy was

not intended to diminish. Not only was energy conserved, but entropy as well; the universe was not designed to “perish,” “wax old,” and “be changed” (Ps. 102:26), but to be “stablished for ever and ever” (Ps. 148:6). In some unknown manner, no longer operating, the sun’s energy probably would have been replenished cyclically, from that radiated into space after some had been used to maintain terrestrial processes.

On the earth itself, none of its resources were intended ever to be depleted, and all processes were to function at perfect efficiency. A great abundance of plant and animal life was soon produced, in response to God’s commands (Gen. 1:11, 20, 24), and continued to multiply, storing energy from the sun in an enlarging biosphere. All necessary disintegrative processes (e.g., digestion, etc.) were presumably in balance with the increasing numbers of highly structured organisms. Order and entropy were thus everywhere in balance, as well as matter and energy. Everything was “very good” (Gen. 1:31)!

The Bible gives little information as to such specific energy sources before the Flood, except for the sun itself. At the time of the Deluge, however, the earth’s energy balance changed drastically. Its greenhouse-like environment, which had been maintained by “waters above the firmament” (Gen. 1:7), was destroyed when the great canopy of vapor condensed and deluged the entire globe. The tremendous stores of chemical energy in the biosphere of the antediluvian world were partially converted in the resulting cataclysm into great stores of coal, oil, and gas, the so-called “fossil fuels.” Much of the incoming solar energy thenceforth would be needed to drive the atmospheric circulations, and to maintain the post-diluvian hydrologic cycle for the earth.

It is significant to realize that today’s pollution problems are derived mostly from using energy stores that were produced in the Noachian Deluge! Coal is the fossil product of the terrestrial plant life, and oil probably of the marine animal life, of the rich biosphere that had been created and developed by the Creator in the beginning. These organisms were not originally designed to serve as fuels for man’s machines, and it is not surprising that the efficiency of heat engines using them is low and the waste products are high. Furthermore, they are exhaustible, and the eventual end of economical oil and gas production is a matter of great concern.

In a sense, of course, the burning of these fossil fuels is merely hastening the process of “returning to the dust,” which is the present fate of all organic life, under the curse. The waste products, both of the processes of life and of the phenomena of death, have always posed a pollution problem to the environment, but the normal cycles of nature

are able to accommodate them in part, and even utilize them (e.g., in the enrichment of the soil, etc.) as long as they are sufficiently dispersed in time and space. When concentrated by abnormal numbers of either men or animals, either in living communities or in massive extinctions, however, such wastes cannot be assimilated, and they initiate various abnormal reactions that accelerate and accentuate environmental decay.

These deleterious changes can be corrected to some extent, but only at the cost of excess energy from other sources and therefore only at great labor and expense. Nuclear energy is one possibility but this, of course, creates its own polluttional problems. Geothermal energy may be a partial answer, in the few regions where it is available. Hydroelectric energy has already been developed to nearly its maximum potential in many parts of the world, and is seriously limited in all parts of the world. The energy in the tides and ocean waves is considerable, but its harnessing is economically feasible in only very restricted localities.

Solar energy is undoubtedly the best ultimate hope for an adequate energy supply, since the sun is the ultimate source of energy for all of earth's processes anyhow. To date, however, no economically efficient solar converters have been developed, except for special and limited applications. Since the sun was created to "give light upon the earth" (Gen. 1:17), and since "there is nothing hid from the heat thereof" (Ps. 19:6), we may well believe that it is possible to find ways to utilize solar energy to meet all of man's legitimate energy needs and to do so with a minimal amount of further damage to the environment. Cost of the needed research should not be prohibitive, at least in relation to other energy and environmental costs.

In any case, a creationist orientation can certainly contribute more effectively to the alleviation of such problems, than can an evolutionary perspective. The creationist recognizes that the world is God's handiwork and that he is God's steward. The divine commission to "have dominion over" and to "subdue" the earth is not a license for despotic exploitation of its resources, but rather a call to service, encouraging man to understand its nature ("science") and then to utilize its resources ("technology") for the benefit of all men, under God.

Eventually, however, if the present world (no matter how carefully its resources were guarded) were to continue indefinitely operating under the present laws of nature, it would die. The "whole creation" is under the "bondage of decay" (Rom. 8:20–22).

But this bleak prospect will never be reached. God's eternal purpose in creation cannot fail. The creation, therefore, must be somehow

redeemed and saved. Although in the present order, the curse is universal and inexorable, the One who imposed it can also remove it (Rev. 22:3).

The redemption price has, in fact, been paid in full (Col. 1:20), and this “redemption of the purchased possession” (Eph. 1:14) will be completely implemented when Christ returns. At that time, everything, including the earth and its land-water-air environment, will all be “[made] new” again (Rev. 21:5), and will then last forever!

In the meantime, every person who has appropriated this redemption individually through an act of faith in his Creator and Redeemer has the privilege of sharing in God’s work of reconciliation, for “He hath given to us the ministry of reconciliation” (2 Cor. 5:18). The work of redemption and reconciliation involves the reclamation and saving both of individual persons and of man’s dominion, for the eternal ages to come. We seek not only to win scientists to Christ, but even to win the sciences themselves to Christ.

“O Lord, how manifold are thy works! in wisdom hast thou made them all: the earth is full of thy riches. . . . The glory of the Lord shall endure for ever: the Lord shall rejoice in his works” (Ps. 104:24, 31).

Evolution and the Population Problem

One of the more disturbing aspects of the environmental movement is the propaganda associated with the so-called “population bomb.” Because of the environmentalists’ fear that the earth’s population is about to exceed the planet’s resources, all sorts of dangerous measures are being proposed and, in some cases, enforced by government. The number of children in Chinese families, for example, is severely restricted. Abortion and homosexuality, once absolutely illegal in most countries, are now not only legal, but positively encouraged in this country and many others, not only as civil rights but also as positive means of population control. Euthanasia and even infanticide are beginning to be promoted in various places with similar justification. Birth control devices are being discussed and freely distributed in many public schools. The feminist movement is, in many respects, denigrating the role of wife and mother. All of these measures have surely slowed or halted the growth of populations in many of the more developed countries, though the growth rate continues high in many Third World nations.

The “carrying capacity” of planet Earth is finite, of course, but the fact is that it is far from being reached as yet. And the interesting thing about all this is that, if evolution were really true, the earth would have been literally overrun with people long ago!

The intellectual and educational establishments today assume it as self-evident that population growth should be halted. Famed anthropologist Margaret Mead said, more than two decades ago:

The United Nations Population Conference, which concluded on 31 August in Bucharest, passed by acclamation a World Plan of Action that dramatized the growing global concern for the planet's plight. . . . At Bucharest it was affirmed that continuing, unrestricted worldwide population growth can negate any socio-economic gains and fatally imperil the environment. . . . Those governments for which excessive population growth is detrimental to their national purpose are given a target date of 1985 to provide information and methods for implementing these goals.⁸

The cause for such concern is the supposed excessive rate of world population increase and the fear that this presages the imminent depletion of the world's capacity to sustain its inhabitants. Two of the leading specialists in this field, Donald Freedman, professor of sociology at the University of Michigan, and Bernard Berelson, president of the Population Council, defined the problem as follows:

In the 1970s the rate of increase has slightly exceeded 2 percent per year. That means a doubling time of less than 35 years, and the number currently being doubled is a very large one. Projection of such growth for very long into the future produces a world population larger than the most optimistic estimates of the planet's carrying capacity.⁹

So urgent did the experts consider this problem to be that the United Nations Organization actually proclaimed 1974 to be "World Population Year." It can be shown, in fact, that if the population continued to increase at the rate of 2 percent per year, in fewer than 700 years there would be one person for every square foot of the earth's surface. Obviously, the present growth rate cannot continue indefinitely.

Nevertheless, creationists find such arguments unconvincing. Since the evidence for a purposeful Creator of the world and mankind is exceedingly strong, the creationist is confident that the world God made

8 Margaret Mead, "World Population: World Responsibility," *Science*, vol. 185 (September 27, 1974), p. 1113.

9 Donald Freedman and Bernard Berelson, "The Human Population," *Scientific American*, vol. 231 (September 1974), p. 31.

for man is large enough and productive enough to accomplish His purpose. That purpose will surely have been consummated before the population exceeds its divinely intended maximum.

According to the biblical record of creation, immediately after the first man and woman were created, God instructed them as follows:

Be fruitful, and multiply, and replenish [literally, “fill”]
the earth, and subdue it (Gen. 1:28).

Essentially the same commandment was given to the handful of survivors of the great Flood (Gen. 9:1). Since man has not yet come anywhere near to *filling* the earth (the total population currently averages less than one person for every 300,000 square feet of land area), it seems unlikely that the earth has yet reached its optimal population, as far as the purposes of the Creator are concerned. The divine command, no doubt, at least envisioned colonizing all parts of the earth and occupying each part to its potential maximum productive capacity.

Throughout the Scriptures, a large family is considered to be a blessing from the Lord (note Ps. 127:3–5; 128:1–6, etc.), not a problem to society, assuming, of course, that these children are going to be brought up “in the nurture and admonition of the Lord” (Eph. 6:4).

The historic fact of creation is prophetic of the future fact of consummation. Many current trends seem to have been predicted in the Bible and, therefore, suggest that the return of Christ and the end of the age may be near at hand. It is, therefore, at least a possibility that the Creator’s work of consummation may solve the population “problem” long before it becomes critical.

Even apart from biblical revelation, however, there is no good reason for alarm over population. The earth is quite able to support a much larger population than it now possesses. Even with the present status of technology (available water for irrigation, potentially arable land, modern methods of soil treatment, and improved crop yields, etc.), authorities estimate that the earth’s reasonable “carrying capacity” is about 50 billion people.¹⁰ Future advances in technology (solar energy, saline conversion, etc.), may well increase this still more.

Therefore, even at the present annual increase of 1.6 percent, it will still be well over 100 years before this maximum population will be reached. However, in order for such a population to be achieved, modern technological knowledge will have to be employed worldwide, in the

¹⁰ Roger Revelle, “Food and Population,” *Scientific American*, vol. 231 (September 1974), p. 168. Revelle was director of the Center for Population Studies at Harvard.

underdeveloped countries as well as in the developed nations. In turn, experience in the latter shows that population growth rates tend to drop off as a society's technology increases. Revelle commented on this as follows:

Here we are faced with a paradox: attainment of the earth's maximum carrying capacity for human beings would require a high level of agricultural technology, which in turn calls for a high level of social and economic development. Such developments, however, would be likely to lead to a cessation of population growth long before the maximum carrying capacity is reached.¹¹

It is interesting that, for the most part, those intellectuals who have been most vocal in support of population limitation (Margaret Mead, for example), are also strong believers in human evolution. This is probably because of their refusal to recognize divine purpose in the world. If there were no creation and, therefore, no purpose or goal in creation, as leading evolutionists believe, then neither is there any reason to believe that the Creator will accomplish His purpose at the end of history. Just as man's past evolution, then, was dependent solely on random natural processes, so must his future be controlled by naturalism, the only difference being that man now knows how to control those processes — or so he hopes.

One of the strange aberrations of the modern drive for ecological and population controls is the notion that the "environmental crisis" is an outgrowth of the biblical teaching that man should multiply numerically and subdue the earth. Professor Lynn White of U.C.L.A. first popularized the perverse notion that this Genesis mandate has served as man's justification for the exploitation of the earth's resources.¹² Professor Richard Means and others have even proposed that we should all revert to belief in a pantheistic polytheism in order to have a proper regard for all aspects of the world and its living things as they have evolved.¹³

This idea is a notable example of evolutionistic confusion of thinking. Christian scholars have never advanced Genesis 1:28 in support of the careless use and waste of any of the earth's resources. To the contrary, since everything is presented in Scripture as the product of God's creative design and purpose, biblical creationist Christians regard themselves and man in general as stewards of the whole creation, accountable to the Creator for its proper development and use.

11 Ibid., p. 169.

12 Lynn White, "Historical Roots of Ecologic Crisis," p. 1203–1207.

13 Richard L. Means, "Why Worry about Nature," *Saturday Review* (December 2, 1967).

On the other hand, it is very significant that all of the earth's serious environmental problems, even its population crisis, have developed during that one century when the evolutionary philosophy had effectively replaced creationism in the thinking of the world's leaders in education, science, and industry. The earth has been exploited not because of any biblical divine mandate, but because of Social Darwinism, economic and military imperialism, secular materialism, anarchistic individualism, and other such applications of the "struggle and survival" rationale of modern evolutionism!

As far as reverting to pantheism is concerned, this is simply another variant of evolutionism, and it will inevitably lead to similar results. The most pantheistic of nations (e.g., India with its Hinduism, China with its Buddhism and Confucianism, etc.) are precisely those nations in which the population/resource ratios have been most severe. It has not been the Judaeo-Christian nations in which population has become a problem, but those with religions of pantheism. How, then, can pantheism solve the very problems it nurtures?

But there is an even greater inconsistency in evolutionary thinking relative to population. The same population statistics that supposedly presage a serious population problem in the future also indicate a very recent origin of man in the past.

To illustrate the problem, assume that the human population increases geometrically (as believed by Thomas Malthus, whose writings were of profound influence on the theories of Charles Darwin). That is, the increase each year is equal to a constant proportion of the population the previous year. This relationship can be expressed algebraically as follows:

$$\text{Equation (1):} \quad P_n = P (1 + r)^n$$

in which P is the population at any certain time, r is the proportionate annual increase in population, and P_n is the population n years later. For example, if the present population is 5 billion and the planet's permissible population is 50 billion, the number of years before this number of persons will be reached at the present 2 percent annual increase can be calculated as follows:

$$50 \times 10^9 = 5 \times 10^9 (1.02)^n$$

$$\text{from which} \quad \log \frac{50}{5} = n \log 1.02$$

$$\text{and} \quad n = \frac{1}{0.0086} = 116 \text{ years}$$

We have already discussed this result, however. Looking toward the past, instead of the future, equation (1) will also indicate how long it would take to produce the present population at 2 percent growth per year, starting with two people, and calculating as follows:

$$5 \times 10^9 = 2(1.02)^n$$

from which
$$n = \frac{9 + \log\left(\frac{5}{2}\right)}{\log 1.02} = 1,093 \text{ years}$$

That is, an initial population of only two people, increasing at 2 percent per year, would become 5 billion people in only 1,093 years. Since written records go back more than 4,000 years, it is obvious that the average growth rate throughout past history has been considerably less than the present rate.

As a matter of interest, we can also use equation (1) to determine what the average growth rate would have to be to generate the present population in 4,000 years, as follows:

$$5 \times 10^9 = 2(1 + r)^{4000}$$

from which
$$r = (2.5 \times 10^9)^{\frac{1}{4000}} - 1 = \frac{1}{2} \%$$

Thus, an average population growth rate of only 1/2 percent would generate the present world population in only 4000 years. This is only one-fourth of the present rate of growth.

Now, although it is obvious that the present rate of growth (2 percent) could not have prevailed for very long in the past, it does seem very unlikely that the growth rate could have averaged significantly less than 1/2 percent. Very little is known about the world population in earlier times, but everything that is known indicates that the population has steadily increased throughout recorded history.

Dr. Ansley J. Coale, director of the Office of Population Research at Princeton University, has discussed the paucity of such data in an important study.

Any numerical description of the development of the human population cannot avoid conjecture, simply because there has never been a census of all the people of the world. . . . The earliest date for which the global population can be calculated with an uncertainty of only, say 20 per cent, is the middle of the 18th century. The next earlier time for which useful data are

available is the beginning of the Christian era, when Rome collected information bearing on the number of people in various parts of the empire.¹⁴

The usually accepted estimates of world population for these two dates are, respectively, about 200 million in A.D. 1, and about one billion in A.D. 1800. The first, however, may be vastly in error, since no one really knows the population in most parts of the world at that early date.

For earlier periods than A.D. 1, absolutely nothing is known concerning world populations. It should be emphatically stressed that all estimates of earlier populations except that recorded in the Bible (namely, that immediately after the great Flood, the world population consisted of eight people) are based solely on evolutionary concepts of human technological development.

For still earlier periods (than A.D. 1) the population must be estimated indirectly from calculations of the number of people who could subsist under the social and technological institutions presumed to prevail at the time. Anthropologists and historians have estimated, for example, that before the introduction of agriculture the world would have supported a hunting and gathering culture of between five and ten million people.¹⁵

Such guesses are useless, however, because they are based on a discredited model, that of human evolution. The creation-cataclysm model of earth history fits all the known facts of man's history much better than the evolution model does, and it recognizes that man's agriculture and other basic technologies are essentially as old as man himself.

In 1650 the world population has been estimated with perhaps reasonable accuracy to have been 600 million. The average rate of increase for the period from 1650 to 1800, therefore, is this:

$$r = \left(\frac{10}{6}\right)^{\frac{1}{150}} - 1 = \frac{1}{3} \%$$

Since this period from 1650 and 1800 antedated the great advances in medicine and technology that have stimulated the more rapid population growth of the 19th and 20th centuries, and also since this is the

14 A.J. Coale, "The History of the Human Population," *Scientific American*, vol. 231 (September 1974), p. 41.

15 Ibid.

earliest period of time for which population data are at all reliable, it seems reasonable that this figure of 1/3 percent, rather than the 1/2 percent previously calculated, should be used as the norm for population growth throughout most of past history.

In that case, the length of time required for the population to grow from 2 people to one billion people, at 1/3 percent increase per year is indicated by the following calculation:

$$n = \frac{\log \left(\frac{10^9}{2} \right)}{\log (1.00333)} = 6,100 \text{ years}$$

To this should be added the 195 years since 1800. Therefore, the most probable date of man's origin, based on the known data from population statistics, is about 6,300 years ago.

This figure, of course, is vastly smaller than the usually assumed million year history of man. Nevertheless, it correlates well not only with biblical chronology, but also with other ancient written records as well as with even the usual evolutionary dates for the origin of agriculture, animal husbandry, urbanization, metallurgy, and other attributes of human civilization.

By arbitrary juggling of population models, of course, the evolutionist can manage to come out with any predetermined date he may choose. People should realize, however, that this *does* require an arbitrary juggling of figures, based solely on the assumptions of human evolution. The actual data of population statistics, interpreted and applied in the most conservative and most probable manner, point to an origin of the human population only several thousands of years ago. The present population could very easily have been attained in only about 6,000 years or so, even if the average population growth rate throughout most of history were only one-sixth as much as it is at present. The burden of proof is altogether on evolutionists if they wish to promote some other population model.

The biblical model for population growth starts with eight people (Noah, his wife, his three sons, and their wives) right after the great Flood. The date of the Flood is not certain. The Ussher Chronology dates it at about 2350 B.C., but possible gaps in the genealogies of Genesis 11 may justify a date as far back as, say, about 6000 B.C., with the probabilities favoring the lower limit rather than the upper limit.

Even using the short Ussher chronology, it is quite reasonable, as we have seen, for the population to have grown from 8 people to 5 billion people in 4,350 years. This growth represents an average annual increase of about 0.5 percent, or an average doubling time of 140 years. Such

figures are quite consistent with all known data of population statistics, especially in the light of the fact that the human death rates were very low for many centuries after the Flood, and family sizes quite large. Thus, in all likelihood, the population growth was very substantial in the early centuries, at least as great as it has become in the present century. In turn, this means that the rate of increase may have been much *less* than 0.50 percent during the long period in between.

In any case, the conclusion is well justified that the biblical chronology, even in its most conservative form, fits well into all the known facts of population growth, much more so than does the evolutionary chronology of human history!

Life on Other Worlds

One very bizarre aspect of the New Age movement is the explosive rise of various forms of occultism in recent years. Such phenomena as “channeling” (the modern euphemism for spiritism or — better — demonism), witchcraft, and astrology are booming.

All of these are, not surprisingly, evolutionary religions, for they all reject the biblical God of creation. One of the founders and leading theoreticians of modern spiritism, for example, was Alfred Russel Wallace, whose better-known mark of distinction was his simultaneous “discovery” with Charles Darwin of “natural selection” as the supposed mechanism of evolution. In common with all other New Age cults, these are pantheistic evolutionary systems, rather than Darwinist systems, but they are just as passionately committed to some form of evolutionism, worshipping nature as “creator.” As noted earlier, the influential Cambridge biologist Rupert Sheldrake, presents that view thus:

But today, with the rise of the green movement, Mother Nature is reasserting herself, whether we like it or not. In particular, the acknowledgment that our planet is a living organism, Gaia, Mother Earth, strikes a responsive chord in millions of people; it reconnects us both with our personal, intuitive experience of nature and with the traditional understanding of nature as alive.¹⁶

This belief in pantheistic evolution applies today not only to Mother Earth, but to the entire cosmos itself. This belief is involved in astrology, of course, which is a way of rationalizing the idea that the stars and constellations are, in some sense, alive, and thus able to influence human

16 Rupert Sheldrake, *The Rebirth of Nature: The Greening of Science and of God* (New York, NY: Bantam Books, 1991), p. 10.

lives and destinies. It also seems to justify the burgeoning belief in “aliens” or “extra-terrestrials,” and their ability to travel from their worlds to our world in what we have called “unidentified flying objects,” or “UFO’s.”

There is not one iota of scientific or biblical evidence that life exists anywhere else in the universe (with the exception, of course, of angels). The “evidence” is entirely anecdotal — tales of UFO sightings and kidnappings and the like — but there is an abundance of this kind of hearsay evidence, for what it is worth.

In view of the complete absence of any real scientific evidence of extra-terrestrial life, it is remarkable that many atheistic scientists (e.g., Carl Sagan) seem quite confident that many inhabited worlds do exist throughout the cosmos, with life forms comparable to those on Earth.

The complete absence of evidence for such life in outer space, however, is altogether ignored by those who believe in it. It is simply an article of faith that, since life has supposedly evolved on one planet in this solar system, it must also have evolved on planets in other solar systems. NASA scientists, especially the geologists associated with this country’s space program, have always admitted that the main purpose of the program was to find evidence as to how this solar system evolved and also to try to find proof of life existing in other “worlds” within the universe.

This aspect of NASA’s program, of course, proved to be a failure. There was no life on the moon, nor on any other planet in the solar system, exactly as predicted by creationists all along.

Furthermore, there is no observational evidence of any other planets anywhere else in the universe! Astronomers believe that there are millions of them, of course, but this idea is based squarely on evolutionary statistics! No one has ever actually *seen* any other planets, and science is supposed to be based on sight, not faith.

Astronomers have occasionally found evidence of molecules in space that are also found in living materials, and they have jumped to the conclusion that this somehow proves that evolution has occurred “out there,” as well as on earth. Such a conclusion is hardly justified by the evidence, however. “Space” molecules are immensely short of being *living* molecules! Furthermore, even these cannot exist very long, and so could hardly evolve into higher molecules.

Although it is clear that these molecules (e.g., OH, H₂, NH₃, H₂CO, HCN, CN HC₃N) exist in space and that they can emit radiation, there is no clear explanation of how they are formed and why they remain stable. Their chemical bonds

should be broken by the intense fluxes of ultra-violet radiation and cosmic rays. Their estimated lifetimes from ultraviolet dissociation in interstellar space is about 200 years.¹⁷

Speculation seems to be unhindered by such facts, however. Many eminent evolutionist scientists continue to believe that life *must* be out there somewhere, because it would be improbable that it would evolve only once in the entire universe!

They hypothesize that thousands of millions of years ago, an intelligent civilization decided to seed other nearby planets with primitive forms of life in the hope that more advanced civilizations might develop. Crick and Orgel claim that their proposal — called Directed Panspermia — is as tenable as other theories that aim to explain the origin of life on earth.¹⁸

If that be so, why then do we not find *some* evidence of intelligent life in other parts of the universe? A remarkable theory suggests that this is because the celestial astronauts do not want us to know that they are there!

A humble explanation of the null results of the searches for life is advanced by a Harvard student, John Ball.¹⁹ He steps into the realms of science fiction with a hypothesis that we are living in a galactic zoo! The idea is that a super civilization may by now have control of the whole galaxy. Just as we have safari parks, zoos and conservation areas, so they may have set aside the solar system as a wilderness zone. The perfect zoo keeper does not make himself known to his charges, and thus we are unaware of their presence.²⁰

Since there is no evidence of life in outer space, so the argument goes, therefore it *must* be there! This kind of evidence is, to say the least, not compelling evidence! Nevertheless if men do not believe in a divine Creator, they must eventually believe in some kind of spontaneous generation of life. Such an idea as that, of course, clearly contradicts the scientific law of cause and effect.

17 Gerald L. Wick, "Interstellar Molecules: Chemicals in the Sky," *Science*, vol. 170 (October 9, 1970), p. 1295.

18 Simon Mitton and Roger Lewin, "Is Anyone Out There?" *New Scientist* (August 16, 1973), p. 380.

19 John Ball, *Icarus*, vol. 19, p. 347.

20 Simon Mitton and Roger Lewin, "Is Anyone Out There?" p. 382.

As far as the evidence of high technological skills found in ancient structures and drawings is concerned, this in no way proves that these skills were imported from somewhere in outer space. To the extent that such evidences are genuine, they can be much more easily and directly explained in terms of the creation model, which suggests that the earliest men, being highly intelligent and living to great ages, had developed a very high civilization, both before the great Flood and, at least in many places, again quite soon after the Flood.

The creation model alone has a scientifically defensible explanation for life. It was specially created by the living Creator, who, himself, has existed from eternity. This explanation is perfectly consistent with causality and with all *known* data. And, as far as we can tell, biological life is unique to this earth.

Nevertheless, evolutionists keep on believing in extra-terrestrial life, and this is almost as true of materialistic evolutionists as of occultic evolutionists. Moreover, many Christians are enamored of the idea, even though the Bible makes it very plain that only “the earth hath [God] given to the children of men” (Ps. 115:16). It is only on planet Earth that God in Christ lived and died and rose again, and it is only here that He will reign forever over the cosmos.

Amazingly though, many scientists have seriously proposed that life evolved in outer space and then somehow reached the earth. Sir Fred Hoyle is one of these. Two other notable scientists, Sir Francis Crick (co-discoverer of DNA) and Leslie Orgel of the University of California at San Diego, have promoted the curious notion of “directed panspermia” (life-sperms are everywhere in space, and some have been directed by advanced galactic civilizations to the earth!), and this idea is receiving serious attention and wide acceptance. Both Orgel²¹ and Crick²² have made calculations and strong statements about the impossibility of chance origin of life on earth. Crick says this, for example:

If a particular amino acid sequence was selected by chance, how rare an event would this be? . . . Suppose the chain is about two hundred amino acids long; this is, if anything, rather less than the average length of proteins of all types. Since we have just twenty possibilities at each place, the number of possibilities is twenty multiplied by itself some two hundred times.

21 Leslie Orgel, “Darwinism at the Very Beginning of Life,” *New Scientist* (April 15, 1982), p. 149–152.

22 Sir Francis Crick, *Life Itself* (New York, NY: Simon and Schuster, 1981).

This is approximately equal to . . . a one followed by 260 zeros. . . . The great majority of sequences can never have been synthesized at all, at any time.²³

Sir Francis then makes the following fascinating admission:

An honest man, armed with all the knowledge available to us now, could only state that in some sense, the origin of life appears at the moment to be almost a miracle, so many are the conditions which would have had to have been satisfied to get it going.²⁴

But since he believes neither in God nor miracles, the eminent Dr. Crick opted for directed panspermia (more recently, he has backed off somewhat from this notion). There is, of course, not the slightest evidence anywhere (except in science fiction and various occult religions) of directed panspermia or anything else approximating extra-terrestrial human or animal life. The entire notion brings us once again to the threshold of an esoteric Marxism. Yockey phrases that view thus:

Faith in the infallible and comprehensive doctrines of dialectic materialism plays a crucial role in origin of life scenarios, and especially in exobiology and its ultimate consequence, the doctrine of advanced extra-terrestrial civilization. That life must exist somewhere in the solar system or “suitable planets elsewhere” is widely and tenaciously believed in spite of lack of evidence, or even abundant evidence to the contrary.²⁵

The extraordinary weakness — in fact complete absence — of any scientific evidence for a naturalistic origin of life anywhere in the universe is a well-kept secret of our establishment science, education, and news media. Christians need to know this fact — and use this fact — in their testimony to the world. It will be enlightening and effective in many hearts.

In a review article on this whole matter of the evolution of life in other worlds, as well as here on earth, John Horgan says:

23 Sir Francis Crick, *Life Itself* (New York, NY: Simon and Schuster, 1981), p. 51.

24 Ibid., p. 88.

25 H.P. Yockey, “Self-Organization Origin of Life Scenarios and Information Theory,” *Journal of Theoretical Biology*, vol. 91 (1981), p. 27. Yockey is an evolutionary biochemist.

About a decade ago Orgel and Crick managed to provoke the public and their colleagues by speculating that the seeds of life were sent to the earth in a spaceship by intelligent beings living on another planet. Orgel says that the proposal, which is known as directed panspermia, was “sort of a joke.” But he notes that it had a serious intent: to point out the inadequacy of all explanations of terrestrial genesis.²⁶

It was once fervently hoped and believed by evolutionary geologists and astronomers that the NASA space probes would find evidence of life, perhaps on the moon, and certainly on Mars. This hope, of course, proved futile, just as many of us had predicted — not because we were prophets, but simply because of biblical revelation concerning the divinely intended roles of the stars and planets in relation to Earth. Although a few evolutionists still hope against hope that some evidence of at least former life will be found on Mars, most now admit that this won’t happen.

Even though some ambiguities remain, there is little doubt about the meaning of the observations of the Viking landers: at least those areas on Mars examined by the two spacecraft are not habitats of life.²⁷

No one really expected to find life on Saturn or Venus or any of the other planets, since the physical conditions on them are not amenable to life in any form. Consequently, the hopes of evolutionists now focus on planetary systems around other stars. Even if such stellar planetary systems do exist somewhere, however (and *this* has not yet been proved), it is futile to hope that any earthbound space probe will ever reach them. In reviewing a book by Isaac Asimov, John Emsley acknowledges the futility of that fantasy:

Asimov also disposes of another popular myth — that one day we will journey to the stars. Here he is tampering with something that might have been better left alone. He quietly knifes the idea in the back, and thereby murders much popular culture on which today’s young people are raised. Space travel is possible between the planets of the solar system, but that is

26 John Horgan, “In the Beginning,” *Scientific American*, vol. 264 (February 1991), p. 125.

27 Norman H. Horowitz, “The Search for Life on Mars,” *Scientific American*, vol. 237 (November 1977), p. 61. Horowitz is biology department chairman at Cal Tech.

all. Whatever probe we launch from planet Earth into the cosmos will get nowhere. It will slowly come to rest between here and the next star. A manned spacecraft would suffer the same fate.²⁸

Even if a spaceship could ever reach the nearest star, which is four light years from Earth, over 10,000 times farther away than the sun, Asimov has shown that such space travelers would require 50,000 years to get there and back!

Because we can never visit another star, so we can never be visited by aliens from another Solar System. Another chunk of popular science folklore bites the dust. Space travel is a meaningless phrase. Star Wars, Star Trek, and a lot of science fiction suddenly seems merely silly. Asimov, you're a spoilsport!²⁹

Interestingly enough, Isaac Asimov wrote many books of science fiction dealing with life in other worlds. As a scientist, however, he realized that it was *fiction*! It could never be anything else, as far as our earthly lives are concerned. Asimov may have wished otherwise, for he himself was an atheistic humanist.

Most "exobiologists," as such scientists call themselves, now realize that they will never find *direct* evidence of life anywhere else in the universe. Accordingly, they now are hoping to find *indirect* evidence by listening to electromagnetic signals sent earthward by possible living beings out there. They have persuaded the government to waste great amounts of money in building and manning large radio-telescopes and other equipment that *might* be able to receive such signals. This pie-in-the-sky has also proved futile so far, and the government is about to give up such expensive evolutionizing.

Is it still reasonable to be optimistic about the search for extra-terrestrial intelligence? After all, researchers around the world have been listening for electromagnetic signals from other civilizations in the universe for more than 25 years now, using ever larger telescopes and increasingly sophisticated equipment. Tipler (1987) estimates that 120,000 hours of

28 John Emsely, "Demolisher of Myths," review of *The Relativity of Wrong*, by Isaac Asimov (New York, NY: Oxford University Press, 1988.), in *New Scientist*, vol. 122 (April 8, 1989), p. 60.

29 Ibid.

observing time have been spent on the search, with, of course, no positive results.³⁰

In spite of all the negative results in the search for signs of extra-terrestrial life, it *must* be there, because consistent evolutionary philosophy requires it!

The basic argument for an optimistic assessment of the likelihood of intelligence elsewhere in the universe is really a reassertion of the ancient belief in the plurality of worlds, the idea that our own world must be duplicated elsewhere. In modern form, the idea assumes that, in the absence of evidence to the contrary, conditions favorable to the emergence of life and intelligence as they exist here on earth are present abundantly in the universe.³¹

Among the perennial optimists in this matter of extra-terrestrial life, the eminent astronomer Carl Sagan stands out. He was very positive in predicting life on Mars and is still hopeful that radio astronomy will turn up this missing evidence. In a recent review article, Sagan acknowledges that the results so far have been negative, but he is nevertheless “encouraged.”

While no one yet has found living organisms beyond the earth, there are reasons to be encouraged.³²

Dr. Sagan’s encouragement now centers on the hope that other solar systems like ours will someday be discovered (none have yet, of course), and the fact that organic molecules (meaning compounds that contain carbon) have been found in space. One must admit that Dr. Sagan does not get discouraged easily! It is hard for an atheist to acknowledge that planet Earth was uniquely created for life by the God who created all things, and that life was uniquely created for planet Earth. That, however, is exactly what all the factual scientific data indicate, and that is what the Bible teaches! Since science can never prove a universal negative, however, evolutionists will continue to have blind faith that life *must* have evolved in more than one place (planet Earth) in an almost infinite universe.

30 David Schwartzman and Lee J. Rickard, “Being Optimistic about the Search for Extraterrestrial Intelligence,” *American Scientist*, vol. 76 (July/August 1988), p. 364.

31 Ibid.

32 Carl Sagan, “The Search for Extra-Terrestrial Life,” *Scientific American*, vol. 271 (October 1994), p. 93.

Chauvinism, Feminism, and Evolution

Traditional Darwinian evolution (slow and gradual struggle for existence and survival of the fittest), as applied in Social Darwinism, racism, imperialism, and fascism, is encountering hard times today, though evolutionism itself is as popular as ever. Now, however, punctuationism is increasingly in vogue. This fits better with Marxism, anarchism, and all the New Age evolutionary cults. And now Darwinism is being increasingly attacked by the modern feminist movement, led by women who resent the traditional inferior evolutionary status accorded them by the Darwinians. This is hardly surprising when one reads the statements on this subject by Charles Darwin and many of his followers.

Having already been labeled racists and imperialists by the new wave of Marxian "revolutionary evolutionists," who insist that the old-style slow-and-gradual evolution must be replaced by rapid-and-catastrophic evolution, Darwinists have now been labeled as chauvinistic and sexist by radical feminists as well.

In a popular book entitled *Darwin*, Wilma George has attacked Charles Darwin's theories of the effect of "sexual selection" on human evolution as not having any basis in scientific fact at all, but as having been based on his Victorian prejudices against women and their abilities. Darwin's own wife, Emma, was quite religious and found her husband's anti-religious views very painful and his incessant hypochondria (which some writers maintain was a psychoneurosis related to his anti-religious guilt feelings) very demanding, but nevertheless she was dutifully attentive and submissive to him throughout his life. Wilma George even shows that Darwin's insistence on an evolution-based male superiority was one major reason why he was able to get evolution so rapidly accepted in place of divine creation. Eveleen Richards comments on this as follows:

In a period when women were beginning to demand the suffrage, higher education and entrance to middle-class professions, it was comforting to know that women could never outstrip men; the new Darwinism scientifically guaranteed it. . . . Darwinism supposedly proved female inferiority by "an evolutionary reconstruction that centers on the aggressive, territorial, hunting male and relegates the female to submissive domesticity and the periphery of the evolutionary process."³³

³³ Eveleen Richards, book review in *New Scientist*, vol. 100 (December 22/29, 1983), p. 887.

The feminist movement is not attacking evolution *per se*, of course, but only Darwinian-style evolution, just as the modern Marxist evolutionists are doing.

As is evident, Charles Darwin, once considered such a great man and great scientist, is rapidly becoming little more than a fallen idol today, even to many who paid devoted homage to him just a few years ago.

Christian women should not be deceived by the radical feminist movement today, although women in these movements do have some legitimate complaints against a social system that still reflects in considerable degree the Social Darwinism of the post-Darwin century, as well as the evolutionary pantheism of both ancient and modern non-Christian religions and philosophies. Women who serve the Lord should remember that *all* of these other religious systems have relegated women to a very inferior place in society. As already pointed out, all such religions are fundamentally evolutionary philosophies of one sort or another.

The Bible, on the other hand, has never taught male “superiority,” though it does delineate the distinctive divine purposes for men and women (a subject beyond the scope of this discussion). As far as “equal rights” are concerned, in terms of real eternal values, men and women have always been equal before God — equal in creation and equal in salvation.

So God created man in his own image, in the image of God created he him; male and female created he them“ (Gen. 1:27).

There is neither male nor female; for ye are all one in Christ Jesus” (Gal. 3:28).

The real answer to the unresolved needs and problems of women in our society is an all-out commitment to genuine biblical creationism, and to the entire Scripture as the Word of God for the temporal and eternal life and happiness of mankind.

Darwin and others of his persuasion made much of what he called “sexual selection” as a key factor in evolution. He argued that evolutionary pressures had made males intellectually superior, as well as physically larger and stronger, in comparison to women.

The chief distinction in the intellectual powers of the two sexes is shown by man’s attaining to a higher eminence in whatever he takes up, than can women — whether requiring

deep thought, reason, or imagination, or merely the use of the senses and hands.³⁴

A modern feminist writer, Bettyann Kevles, in an in-depth study of the teachings of Darwin and other evolutionists on supposed female inferiority as related to their evolutionary history, wrote as follows concerning an evolutionist contemporary of Darwin, George Romanes:

Romanes . . . shared Darwin's view that females were less highly evolved than males — ideas which he articulated in several books and many articles that influenced a whole generation of biologists.³⁵

Another modern evolutionist, Stephen Jay Gould, in a review of this rather sensitive subject, refers to the teachings of an influential 19th century surgeon and anthropologist, Paul Broca, founder of the Anthropology Society in Europe. Broca, with extensive data, concluded that the average female brain was significantly smaller than the average male brain, and that this proved the intellectual inferiority of women. Broca concluded that this was "a result of differing evolutionary pressures upon dominant men and passive women."³⁶ Gould also noted:

Broca's conclusions were the shared assumptions of most successful white males during this time.³⁷

In another article, Gould quotes from Darwin's *Descent of Man*:

[Darwin says]: "It is generally admitted that with woman the powers of intuition, of rapid perception, and perhaps of imitation, are more strongly marked than in man; but some, at least, of these faculties are characteristic of the lower races, and therefore of a past and lower state of civilization."

It is remarkable that Darwin manages to display his evolutionism, his racism, and his male chauvinism in just one sentence.³⁸

34 Charles Darwin, *The Descent of Man* (New York, NY: Appleton, 1896), p. 564.

35 Bettyann Kevles, *Females of the Species* (Cambridge, MA: Harvard University Press, 1986), p. 8. Cited in "Darwin's Teaching of Women's Inferiority," *ICR Impact*, no. 249 (March 1994), p. i, by Dr. Jerry Bergman.

36 Stephen Jay Gould, *The Mismeasure of Man* (New York, NY: W. W. Norton and Co., 1981), p. 104. Cited by Bergman, "Darwin's Teaching of Women's Inferiority," p. iii.

37 Gould, *The Mismeasure of Man*, p. 85.

38 Stephen Jay Gould, "The Moral State of Tahiti—and of Darwin," *Natural History* (October 1991), p. 14, quoting from Darwin's *Descent of Man*, 1896 ed., p. 564.

Darwin goes on to display still further his evolutionary prejudice against women.

It is, indeed, fortunate that the law of the equal transmission of characters to both sexes has commonly prevailed throughout the whole class of mammals; otherwise it is probable that man would have become as superior in mental endowment to woman, as the peacock is in ornamental plumage to the peahen.³⁹

With such an evolution-based attitude so prominent among men of the century following Darwin, it is at least understandable that there should develop a strong female revulsion against such male chauvinism. The result, however, has been a pagan feminist religion.

The consequent radical modern feminism is far more than an attempt by women to gain equal status with men in business and the professions. It is a drive to restore what many believe was once a matriarchal society, structured around the so-called “old religion,” worshipping the goddess, essentially the same as Mother Earth, or Mother Nature.

Though the modern feminist movement tends to resent Darwin and the neo-Darwinian evolutionists, it has by no means abandoned evolutionism. All of its leaders, and most of its followers, are evolutionary humanists of the New Age variety, and their evolutionism is in general an updated pantheism, centered in the “goddess.”

A significant minority are even involved in wicca, or witchcraft, which is alleged by its practitioners to be essentially a revival of the “Old Religion,” practiced by ancient matriarchal societies before the rise of male dominance.

They call themselves followers of the Craft or the Old Religion or wicca. They have nothing to do with either black magic or Christianity or, for that matter, with any monotheistic religion, as they are Neo-pagans. Some wiccans believe their gods — the lord of animals, of death and beyond, and the triple goddess (maiden, mother, and crone) — are through forms built up over the centuries. Others think they are archetypes, still others that they are literal divine entities. Whatever their understanding of the deities, these witches seek harmony with nature and to enhance their spiritual life.⁴⁰

39 Ibid.

40 Derk Kinnone Roelofsma, “Inside the Circle of Witches Modern,” *Insight* (June 8, 1987), p. 59.

There are believed to be only about 100,000 practicing witchcraft ("wise craft," or wicca) in the United States, but its origins are quite ancient.

The Craft, the story goes, dates back to Paleolithic times when humans worshipped a goddess of fertility and a god of the hunt. The names of the deities changed from place to place, but basically the same gods were held in belief everywhere.⁴¹

This obviously is essentially ancient pagan occultism, or evolutionary pantheism, revived. There are many other groups of feminists, of course, and all believe in some form of evolutionism.

Wicca devotees are not the only women to have rediscovered the Goddess. She has become the sacral element of the feminist movement, its binding spiritual force. Congregations of Woman Church abound. . . . Goddess devotees are at pains to emphasize a common creed of non-violence, care for the earth, and harmony of all things with nature.⁴²

However, ordinary women, even those striving hard for elimination of sexism and for attainment of full equality with men, do not get very much involved with the actual theory and ritual of goddess worship.

Constituents of the Goddess are, more often than not, academics, professionals, members of the highly educated elite. They talk a lot, they argue and dissent, they are keenly attuned to slight. . . . The Goddess of feminism (in whatever form) was rescued from oblivion to emblemize and sanctify the quest for woman-power in the private as in the political arena. And the evocation of a Golden Goddess Age lent the quest scholarly warrant. Ultimately, the Goddess is not for the many but for the self-chosen few. She is not a divinity for all seasons. It is hard to believe she ever was.⁴³

Feminists occasionally argue that the Bible discriminates against women, but the fact is that Christian women in Christian homes in Christian countries are better treated and regarded more highly than are

41 Derk Kinnone Roelofsma, "Inside the Circle of Witches Modern," *Insight* (June 8, 1987), p. 60.

42 Olivia Vlahos, "The Goddess that Failed," *First Things* (December 1992), p. 12.

43 *Ibid.*, p. 19.

any other women in the world. Women in pantheistic nations (e.g., India) are notoriously ill-treated, almost like slaves.

The Bible does indicate, of course, that God ordained distinctive roles for men and women, and they are physiologically equipped for those roles. Both sexes, however, are equal before the Lord, as far as worth and destiny are concerned. “For ye are all the children of God by faith in Christ Jesus. . . . there is neither male nor female: for ye are all one in Christ Jesus” (Gal. 3:28). Both men and women are “heirs together of the grace of life” (1 Pet. 3:7).

Evolutionary Dominance in Education

The current revival of interest in creationism has focused largely on the public schools. Parents, pastors, and others have become painfully aware that, in the name of “science,” their young people are being thoroughly indoctrinated in the deadly philosophy of evolutionary humanism. Biblical creationism is either ridiculed or (which is even worse) ignored as not worth mentioning.

This indoctrination is accomplished not only formally and directly in, say, biology and geology courses, but even more effectively through indirect application of evolutionary assumptions in the social sciences and humanities, as well as in the very methodology of modern educationism. Occasionally, an educator will react defensively to such charges by insisting that, in his class or school, evolution is presented only as a “theory” and that other theories are also included. What this usually means is that various mythological ideas of origins are mentioned rapidly in passing (Hindu, American Indian, Babylonian, etc., as well as the “story” in Genesis), and then the rest of the semester is spent in studying the only “theory” that is taken seriously by *scientists* — namely, evolution!

One of the leading evolutionists of our times, Dr. Theodosius Dobzhansky, made a fascinating comment and admission in one of his seemingly innumerable articles, more than 30 years ago:

It would be wrong to say that the biological theory of evolution has gained universal acceptance among biologists or even among geneticists. This is perhaps unlikely to be achieved by any theory which is so extraordinarily rich in philosophic and humanistic implications. Its acceptance is nevertheless so wide that its opponents complain of inability to get a hearing for their views.⁴⁴

44 Theodosius Dobzhansky, “Evolutionary and Population Genetics,” *Science*, vol. 142 (November 29, 1963), p. 1134.

Note that evolution is “rich in philosophic and humanistic implications.” It is those very implications to which creationists object. Moreover, this fact of an implied philosophy of humanism is exactly what brands evolution as fundamentally a *religion*, rather than a science!

When creationists propose, however, that creation be taught in the schools along with evolution, evolutionists commonly react emotionally, rather than scientifically. Their “religion” of naturalism and humanism has been, in effect, the established religion of the state for a hundred years, and they fear competition. They usually refuse to teach scientific creationism on the basis of their obviously false claim that creation is religion and evolution is science.

In the ultimate sense, *no* concept of origins can be really scientific. In the present world, neither evolution nor creation is taking place, so far as can be observed (and science is supposed to be based on observation!). Cats beget cats and fruit flies beget fruit flies. Life comes only from life. There is nothing new under the sun.

Neither evolution nor creation is accessible to the scientific method, since both deal with origins and history, not with presently observable and repeatable events. They can, however, be formulated as scientific *models*, or frameworks, within which to predict and correlate observed facts. Neither can be *proved*; neither can be *tested*. They can only be *compared* in terms of the relative ease with which they can explain data that exist in the real world.

There are, therefore, sound scientific and pedagogical reasons why *both* models should be taught, as objectively as possible, in public classrooms, giving arguments pro and con for each. Some students and their parents believe in creation, some in evolution, and some are undecided. If creationists desire *only* the creation model to be taught, they should send their children to private schools that do this; if evolutionists want only evolution to be taught, they should provide private schools for *that* purpose. The public schools should be neutral and either teach both theories or teach neither theory.

This is clearly the most equitable and constitutional approach. Many people have been led to believe, however, that court decisions restricting “religious” teaching in the public schools apply to “creation” teaching, and not to “evolution” teaching. Nevertheless, creationism is actually a far more effective scientific model than evolutionism, and evolution requires a far more credulous religious faith in the illogical and unprovable than does creation. An abundance of sound scientific literature is available today to document this statement, but few evolutionists have

bothered to read any of it. Many of those who *have* read it have become creationists!

For a while, during the 1970s especially, evolutionists seemed willing to debate creationists on the scientific merits of evolution versus creation. These debates were commonly held in secular university or public high school auditoriums, with audiences largely composed of students, parents, and faculty. ICR scientists alone, especially Dr. Duane Gish, have participated in over 300 such debates. Almost invariably the creationists have won the debates, at least in the judgment of most of the audience.

Consequently, in recent years, it has become more difficult to arrange debates, particularly with eminent scientists. For example, such evolutionary spokesmen as Carl Sagan, Stephen Jay Gould, Isaac Asimov, and others of like prestige have never condescended to debate a creationist scientist. These men are, of course, quite prolific with bombastic statements about the unscientific nature of creationist arguments, as long as they can make such statements to sympathetic news reporters or to captive audiences in their classes.

In such debates as *are* scheduled, however, evolutionists will commonly attack the credentials or character of their opponents (*ad hominem* arguments), attack biblical statements (especially relative to the young earth and the global Flood), criticize fundamentalists in general and (perhaps) present some scientific evidence for micro-evolution (that is, horizontal variations *within* kinds). One thing that they *never* do is give any real scientific proof of *macro*-evolution. This they cannot do, of course, because no such proof exists — not even any good evidence!

The impact of the debates can be gauged by the concern shown by the evolutionists. A letter to the editor of *Bioscience* is indicative.

Why do creationists seem to be the consistent winners in public debates with evolutionists? . . . We biologists are our own worst enemies in the creationist-evolutionist controversies. We must no longer duck this and other issues related to biology and human affairs, and when we do face them we must think clearly and express ourselves accordingly. We may still not be consistent winners in the creationist-evolutionist debates, but let the losses that occur be attributable to other than lapses in professional standards.⁴⁵

45 Dennis Dubay, "Evolution/Creation Debate," *Bioscience*, vol. 30 (January 1980), p. 4–5.

Much more vitriolic was an article by Joel Cracraft of the Department of Anatomy at the University of Illinois Medical Center in Chicago. Dr. Cracraft was a science advisor to the American Civil Liberties Union at the Arkansas Creation Trial of 1981, as well as organizer of an anti-creationist symposium at the 1981 convention of the American Association for Advancement of Science. Note, in the following, his backhanded admission of the rising influence of creationism, and the poor case that can be made for scientific evolutionism.

With their pleas for a fair hearing, the scientific creationists, in particular those at the ICR, excel in duping the public and manipulating both the press and their adversaries. How else can one explain their countless speaking invitations from secular universities and the willingness of many scientists to debate them, as if “scientific” creationism were an intellectual equal of evolutionary biology or, more accurately, science as a whole?⁴⁶

One could possibly explain this, Dr. Cracraft, by the fact that more and more people, especially college students, are becoming aware that they have, indeed, been duped for many years, though not by creationists. As Dr. Colin Patterson, one of the world’s top evolutionists, said not long ago:

Then I woke up and realized that all my life I had been duped into taking evolutionism as revealed truth in some way.⁴⁷

It is most significant that Cracraft expresses strong objection to debating evolution and creation on their scientific merits:

Debates are to the advantage of the creationists especially when they create the ground rules: “We will only debate the scientific evidences . . . religion and philosophy will not be subjects for discussion.” . . . Structured in this way, debates invariably place scientists on the defensive because the creationists seek to promote a dualistic philosophy: evidence against evolution, they argue is evidence for creationism. On

46 Joel Cracraft, “Reflections on the Arkansas Creation Trial,” *Paleobiology*, vol. 8, no. 2 (1982), p. 83.

47 Colin Patterson, “Evolution and Creationism,” Speech at American Museum of Natural History, transcript (New York, NY, November 5, 1981), p. 2.

the other hand, it is no surprise that creationists are reluctant to debate an altogether different proposition. Is “scientific” creationism science or religion?⁴⁸

In other words, evolutionists would much rather attack the religious aspects of creationism than defend the scientific aspects of evolutionism! Creationists find it very difficult to understand why, if evolution is a proven fact of science (as evolutionists continually insist, and as they perpetually brainwash students into believing), that a debate argued strictly from the scientific evidence is “to the advantage of the creationists.”

Concerning Cracraft’s petty lament that creationists present only negative evidence against evolution, surely he is intelligent enough to realize that evidence against evolution, such as the creationists present in their lectures and debates, is, indeed, positive evidence for creation. *There are only these two possibilities!* Either all things have developed by natural processes in a self-contained universe, or at least some things have come by supernatural processes in an open universe. The one alternative is evolution, the other is creation, and there is no third option. In this type of debate, the creationist is not arguing against a particular form of evolution (e.g., neo-Darwinism), or for a particular account of creation (e.g., the Genesis record), but only the broad and basic question of whether observed scientific data fit evolution better than they fit creation.

For example, the evolution model would be strongly confirmed if one could find true transitional structures between major kinds of organisms, either in the fossil record or in living organisms (e.g., “sceathers,” reptilian scales in the process of evolution into avian feathers). The creation model indicates that no such thing ever existed, since the Creator would have created fully functional structures for each creature in accordance with His intended purpose for that creature.

Therefore, the ubiquitous, unbridgeable gaps between major kinds of organisms constitute strong evidence (though not “proof”) against evolution, and strong evidence (though not “proof”) for creation. The same “dualism” (as Cracraft dubs it) will be found to apply to the other scientific arguments used by creationists (the second law of thermodynamics, the deteriorative nature of mutations, the improbability of complex or symbiotic systems, the conservative character of natural selection, etc., etc.).

48 Joel Cracraft, “Reflections,” p. 83–84.

The debates have surely brought one important fact to the attention of the public. Creationism can at least be discussed scientifically, strictly on the evidence from scientific data. Evolutionists may complain that creationists have a “hidden agenda,” as the title of an article in the journal *Christianity Today* put it, and that they really believe in the biblical account of creation even though they don’t talk about it in their debates. But this is all irrelevant to the basic question of whether the actual hard data of paleontology, genetics, thermodynamics, etc., fit in with the *scientific* model of creationism, *as well as or better than they fit in with evolution*. This is the only aspect of creationism that creationists believe should be taught in public institutions anyway, so this is the only aspect that should be debated in such institutions.

But evolutionists, intuitively realizing that any real scientific case for evolution is very weak (creationists would say that it is nonexistent!), prefer to defend it by branding creation as “religious,” and then having creationism excluded from public institutions on the basis of church/state separation. A favorite tactic is to cite some creationist book or article expounding biblical creationism, and then to recoil with horror at the prospect of having *that* concept taught to public school children.

Cracraft, for example, has used this device. After quoting (out of context) one of our discussions on the subject of the possible influence of Satan, angels, and demons on earth and cosmic history (which are topics definitely treated in the Bible and even discussed in some detail by our Lord Jesus Christ) in a book specifically stated to be a Bible commentary, and certainly never intended for use in public schools, Cracraft then makes the following utterly irrelevant and cleverly misleading comment:

Inasmuch as Dr. Morris and others like him want to exercise control over the public school curricula, those reading this should take it upon themselves to make Dr. Morris’ judgments about science available to local school boards, religious leaders, and state legislators. After all, he is director of the most important creationist organization in the United States and will be directly involved in writing educational materials for the public schools if creationists get their way.⁴⁹

Well, apparently all is fair in love and war, and evolutionists have definitely mounted a new war against creation.

⁴⁹ Joel Cracraft, “Reflections on the Arkansas Creation Trial,” *Paleobiology*, vol. 8, no. 2 (1982), p. 88.

Creationists in no way wish to *control* public school curricula, of course, but they *have* been urging school administrators to be fair and to use a “two-model” approach in the schools. Since there are only two real world views of origins, history and meaning (that is, God-centered or man-centered, creationism or evolutionism, theism or humanism), why should tax-supported institutions be used to brainwash impressionable students *only* in evolutionary humanism? The latter is certainly no more scientific, nor less religious, than theistic creationism.

Furthermore, the founding principles of our nation were based upon the truth of a Creator and of a natural order and moral law created by God. The Declaration of Independence itself begins with this premise. Dr. Elias Boudinot, president of the Continental Congress in 1782, in an Independence Day address that year, gave expression to what was commonly believed by Americans at that time:

The history of the world, as well sacred as profane, bears witness to the use and importance of setting apart a day as a memorial of great events, whether of a religious or a political nature. No sooner had the great Creator of the heavens and the earth finished His almighty work, and pronounced all very good, but He set apart (not an anniversary, or one day in a year), but one day in seven, for the commemoration of His inimitable power in producing all things out of nothing.⁵⁰

How, then, could it now be wrong to teach in our schools — at least as an alternative — the very premise upon which our nation and its government were founded? Dr. Boudinot, and most other American leaders of that day, even believed and taught *biblical* creationism (he was, in fact, also the first president of the American Bible Society). Some, as deists, did not believe in biblical inerrancy, but they did believe in God and creation. Even such a deist as Thomas Jefferson, often quoted as the great advocate of church-state separation, believed in special creation and rejected the evolutionary theories of his day.

Separation of church and state, incidentally, has never been a constitutional requirement, only a modern judicial interpretation. The First Amendment prohibited an “established religion,” which, in the context of the times, meant only the state endorsement and support of a particular sect or denomination. It was certainly *never* intended to ban

50 Elias Boudinot, “Independence Day Address,” presented to the New Jersey Society of the Cincinnati, July 4, 1873. Cited in *Foundation for Christian Self-Government Newsletter* (July 1982), p. 3.

God from the schools and to establish the religion of secular humanism in our schools, as has been done.⁵¹

For that matter, hardly anyone would even argue that such was the original intent. The problem is that evolution has been applied to our legal system as well. Modern lawyers and judges, steeped in evolutionary philosophy in their training, have come to regard the Constitution as “evolving” along with society. There are no “absolutes” in an evolving world, so even the Constitution, as well as the Bible and the concept of God, must evolve along with the changing mores of the current times.

Accordingly, “liberal” justices have gradually banned not only sectarianism, but even Christianity itself from the classrooms of what the founding fathers had intended (and the Supreme Court had affirmed, more than once) to be a Christian nation, one that accepted the Bible as the authoritative Word of God. In the process, of course, classroom prayer and Bible reading have now also been outlawed in the public schools.

It was the hope of the creationist scientists that, by stressing the scientific validity of creationism and making it clear that they were not asking for the biblical version of creation to be taught in the schools, many teachers and school administrators would begin to take advantage of their constitutional rights (as well as those of their students), by using the scientific evidences and arguments that were now becoming more accessible, to begin a real “two-model” approach in the schools, thus being fair to both evolutionists and creationists among their constituents.

Much headway was being made along these lines, and more and more schools and teachers began to do just this. The various teacher-education programs of ICR, along with the literature now available, were becoming widely effective.

But the opposition began to grow as well, and progress seemed too slow to suit many impatient creationist activists. Deciding that their constitutional rights were being violated (as indeed they were), many decided to try the political route, initiating litigation and/or legislation to *compel* the schools and other public institutions to adopt a two-model approach. Lawsuits were filed in Washington, DC, Houston, Sacramento, and other places, and creationist bills were introduced in many legislative assemblies.

Despite widespread publicity to the contrary, the Institute for Creation Research had always tried to discourage a legalistic and political

51 Wendell R. Bird, “Freedom from Establishment and Unneutrality in Public School Instruction and Religious School Regulation,” *Harvard Journal of Law and Public Policy* (June 1979), p. 127–129, 138–140.

approach to this issue (as has the Creation Research Society). History shows that neither scientific nor religious principles can be effectively legislated, and since there had been no legal restriction against teaching creation anyway, most creationist scientists felt rather strongly that, in the long run, education and persuasion would accomplish more than legislation and coercion.

Furthermore, the present legal and judicial climate is so humanistic that court decisions, no matter how strong the evidence and how valid the constitutional position, commonly go against the creationists. Even in the event of a favorable court decision, the creationists always seem to lose the case in the biased reporting of the news media. Finally, such laws would be very difficult to enforce, even if passed and upheld by the courts. Teachers compelled to teach creationism against their will, and without any adequate knowledge of the creationist arguments and evidence, would probably do more harm than good in the classroom anyway.

So, although the route of persuasion seems slower than that of compulsion, it holds more promise of ultimate success, and our ICR literature has stressed this repeatedly. However, many creationists have felt otherwise and have tried to use the courts or legislatures to get the two-model approach accepted.

This situation placed ICR in a difficult position. While not favoring legislative or political action at all, poorly drawn bills and political defeats would prove so harmful that ICR inadvertently became involved in these activities to try to prevent damaging errors. For example, a model creation *resolution* (not *law*) was prepared by ICR in order to enable school boards to *encourage* (not *compel*) a two-model approach, and ICR scientists and attorneys have been allowed to go on temporary leave in order to serve as expert witnesses or deputized attorneys in connection with creationist litigation. The costs of all such activities were always borne not by ICR, but by the organizations requesting them.

The Arkansas creation law resulted, of course, in a lawsuit filed by the ACLU and, finally, a strongly negative decision striking down the bill. Even more harmfully, it resulted in a news-media circus and a great wave of bad publicity for the whole creationist cause. A similar ACLU lawsuit against a more secularized, but similar, law in Louisiana eventually reached the U.S. Supreme Court, where the evolutionists again won, though against a sharply reasoned dissent by Justices Scalia and Rehnquist.

In spite of the bad precedent set in Arkansas and Louisiana, one good result may have been accomplished. The tremendous publicity generated by these trials, coming on top of the increasing interest generated by

creationist books, debates, seminars, and other activities, caused a sharp upturn in public awareness of the issue, and apparently even a significant increase of belief in creationism.

A Gallup poll in 1980 showed that over half the population of the United States believes in a literal, specially created Adam and Eve as the parents of the whole human race. Then a 1981 Associated Press-NBC News poll found that no less than 76 percent of the people wanted creation to be taught along with evolution in the public schools, and that another 10 percent wanted *only* creation to be taught! Then, in August 1982, another Gallup poll found that 44 percent of the people believed not only in creation, but in *recent* creation, less than 10,000 years ago. Thirty-eight percent *more* believed in God as Creator, though they believed in an old earth and a divinely guided process of evolution. Only 9 percent believed in atheistic evolution, and 9 percent were undecided.

These sampling statistics are especially significant in the light of the many decades of indoctrination through the schools, textbooks, and news media to the effect that the earth is billions of years old, total evolution is a scientific fact, and creationism, being purely religious, has no place in the schools. No wonder the evolutionists have become almost hysterical in their opposition to the creationist movement!

An interesting comment appeared following the Sacramento lawsuit of early 1981, filed by a creationist group (the Creation Science Research Center) against the state on the basis that exclusive evolutionary teaching in the schools was an infringement on their religious rights.

For his own part, [attorney for the CSRC] Turner says his recent experience in the courtroom has whetted his desire for more. "These scientists get up on the stand, and act as if their very lives were being attacked. They not only close ranks, but they almost deny anybody the right to know the internal fights that go on within the evolutionary crowd. They're pompous and arrogant, just the kind of people that the First Amendment was written to protect us against."⁵²

From personal experience in many debates, and with evolutionist questioners (and often hecklers) in many campus audiences, ICR scientists can unequivocally echo Mr. Turner's observations. If evolution is irrefutably scientific and objectively factual, as evolutionists have tried to

⁵² William J. Broad, "Creationists Limit Scope of Evolution Case," *Science*, vol. 211 (March 20, 1981), p. 1332.

persuade themselves, it is strange that they quickly become extremely emotional and angry when any scientific question is raised about its validity. These are not appropriate attitudes and reactions for *scientists*!

The reality is, of course, that evolution is not a science at all, but a religion, and creationists are questioning the tenets of a fanatical religion. No wonder its devotees become hysterical!

The writers have discussed the essentially religious character of evolutionism in many other places,⁵³ so they will not do so here, except to note that evolutionists themselves are becoming very sensitive on this issue.

A rallying of the ranks would definitely be needed if creationists argued that evolution was a religion. Constitutional scholars do not scoff at the issue, one expert at Harvard recently saying that it is “far from a frivolous argument.”⁵⁴

The evolutionary religion, of course, is simply humanism (at least as taught in American schools), and even the American Humanist Association acknowledges that humanism is “a non-theistic religion.”

The creationists have portrayed Darwinism as a cornerstone of “secular humanism,” a term they use to describe the belief that man, not God, is the source of right and wrong. They blame humanist teaching for all sorts of modern ills — from juvenile delinquency to the high rate of abortions — and want to replace it with the teaching of Christian morality. . . . As the creationists’ goals become clear, many scientists, realizing that they have been secular humanists all along, are beginning to marshal their forces. . . . Evolutionists are beginning to realize that, for the first time in half a century, they may have to defend themselves in court.⁵⁵

Some sense of the alarm in the evolutionists’ camp was indicated by a remarkable fund-raising letter circulated by the atheistic humanist Isaac Asimov, on behalf of the American Civil Liberties Union and its Louisiana creation lawsuit:

We must be prepared for the long and costly battle of challenging every creationist statute in every state in which it

53 For example, *King of Creation* (San Diego, CA: Creation-Life Publishers, 1980), p. 67–108.

54 William J. Broad, “Creationists Limit Scope,” p. 1331.

55 Joel Gurin, “The Creationist Revival,” *The Sciences*, vol. 23 (New York Academy of Science, April 1981), p. 34.

is introduced. Unbelievable as it may seem, there are millions of Americans who call themselves “scientific creationists.” These religious zealots . . . are marching like an army of the night into our public schools with their Bibles held high. . . . Today, I am writing my personal check for \$100 to help the ACLU finance this important case. I urge you, too, to write your check today. Your help is needed desperately right now.⁵⁶

Another interesting commentary on the state of mind of evolutionists was provided by Norman Macbeth. After first discussing an article refuting natural selection, written by Professor Ronald Brady, Macbeth narrates the following:

A few minutes ago I mentioned Ron Brady’s article on natural selection in *Systematic Zoology*. I will not name the man or the college in this case but it was an Ivy League College and a respectable man. . . . So they told [a student] to go on down to the library . . . and read it right there. He came back in half an hour and said, “. . . the article isn’t there, it’s been scissored out.” Next day the assistant professor went into the office of the head of the department on some other business and on the head’s table he saw the missing pages. . . . The head of the department said, “Well, of course I don’t believe in censorship in any form, but I just couldn’t bear the idea of my students reading that article.” End of story.⁵⁷

Macbeth, who was on close speaking terms with many leading evolutionists, especially in the northeastern states, noted that they were almost irrationally fearful of the creationists and were determined to stop them by any means possible. Furthermore, says Macbeth:

They are not revealing all the dirt under the rug in their approach to the public. There is a feeling that they ought to keep back the worst so that their public reputation would not suffer and the creationists wouldn’t get any ammunition.⁵⁸

56 Isaac Asimov, Fund Appeal Letter for American Civil Liberties Union (March 1982).

57 Norman Macbeth, “Darwinism: A Time for Funerals,” *Towards*, vol. 2 (Spring 1982), p. 22.

58 Ibid.

Time and space do not allow us to survey the multitude of anti-creationist books and articles being published today. More than 50 books and almost every scientific and educational journal, most of the popular magazines, and most of the nation's newspapers have featured one or more anti-creationist articles in recent years. Practically all are characterized by gross misunderstanding at best and blatant falsehood at worst, presenting a distorted caricature of creationism and the creationist movement in general, and often attacking ICR and its scientific staff in particular.

The same false charges (long since answered) are repeated over and over, apparently on the principle that wishful thinking will make them valid. A large number of both local and national telecasts, as well as radio broadcasts, have likewise attempted to smear creationists. Always the theme is that creationists are nothing but a small group of religious fundamentalists attempting to force their unscientific views on other people, whereas evolutionists are careful, clear-thinking, sober-minded scientists.

But this media attack has not worked, and more and more people are becoming creationists. Not only the American Civil Liberties Union, but many other organizations became more and more active in anti-creationist propaganda. The most prestigious of all scientific organizations, the National Academy of Sciences, hosted a meeting in October 1981, with representatives from many key organizations⁵⁹ present, to plan a broad nationwide anti-creationist strategy for the years ahead.

The meeting produced many suggestions. A paper circulated among the participating societies by A. G. Lazen, executive director of Assembly of Life Sciences, National Academy of Sciences, after the meeting, presented a summary of its recommendations. Among these were the following:

A communications network called Committees of Correspondence . . . to use political action at the local level.⁶⁰

59 Organizations included were the American Association for Advancement of Science, American Humanist Association, National Association of Biology Teachers, American Anthropological Association, National Science Teachers Association, American Museum of Natural History, Smithsonian Institution, American Society of Biological Chemists, National Cancer Institute, Biological Sciences Curriculum Study, American Geological Institute, American Institute of Biological Sciences, and others.

60 Alvin G. Lazen, "Summary Report: Meeting on Creationism-Evolutionism," *National Academy of Sciences* (Washington, DC, October 19, 1981), p. 2.

These local committees had already been initiated by an activist group in the AAAS, and they have indeed become quite active in fighting creationism at the local level. Continuing with other recommendations, we note the following:

It was generally agreed that debates were to be avoided. . . . However, it was recognized that debates might be unavoidable . . . and that it was necessary to find means to identify appropriate debaters and to better prepare them for their task. . . . It was suggested by several persons that an “Institute for Evolution Research” was needed to counter the San Diego-based Institute for Creation Research.⁶¹

There was much more, but a key paper was that presented by veteran creationist-fighter John A. Moore of the University of California at Riverside. Dr. Moore’s long diatribe included at least a dozen major recommendations, many of them involving substantial costs. But first he made this very significant acknowledgment:

The climate of the times suggests that the problem will be with us for a very long time. . . .⁶²

One thing is sure: the situation will never revert to the way it was before, as evolutionists might wish. There are now thousands of fully qualified scientists who have become creationists, and there are many more thousands of creationist students in the universities and colleges. Almost half of the American population now believes in special, recent creation, notwithstanding decades of evolutionary brainwashing in the schools, and almost 90 percent want creation to be brought back into the public schools and taught as a viable model of origins. The evolutionists have good cause to be concerned; the creationists are no longer an insignificant fringe minority.

Dr. Moore went on to recommend that a national coalition of societies and universities be formed to fight creation. This national consortium would, among other things perform the following:

1. Establish a national information-gathering network,
2. Keep the scientific and educational establishments informed,

⁶¹ Ibid., p. 3.

⁶² John A. Moore, “Countering the Creationists,” paper presented to the National Academy of Sciences *Ad Hoc* Committee on Creationism (Washington, DC, October 19, 1981), p. 1.

3. Assemble anti-creationist statements and classroom materials,
4. Maintain a list of key individuals for different assignments,
5. Support travel and other costs of anti-creationist projects,
6. Secure cooperation of liberal church groups, social scientists, and others,
7. Obtain college funds from foundations and individuals,
8. Conduct anti-creationist short courses for teachers and others,
9. Reform scientific education to pre-empt creationist inroads,
10. Contact lawmakers and other people of key influence,
11. Encourage evolutionists to speak with force and authority,
12. Seek to persuade every American scientist and science teacher to contribute about \$10 annually for the work of the consortium.

Dr. Moore concluded his paper with the following cogent warning and claim (sad to say, a true claim):

If we do not resolve our problems with the creationists, we have only ourselves to blame. Let's remember, the greatest resource of all is available to us — the educational system of the nation.⁶³

There have been a number of similar “war councils” and other meetings sponsored by various organizations in recent years. A group of scientists and others associated with the American Humanist Association started publishing a regular anti-creationist journal, and the National Biology Teachers Association publishes a regular anti-creationist newsletter. At least 50 bitter and misleading anti-creationist books have been published since 1970.

This horrendously costly and troublesome anti-creationist vendetta is, of course, all very unnecessary. Since evolution is presumably a fact of science, all the evolutionists need to do is to present one scientific *proof* of evolution. Or even some real unequivocal scientific evidence. *That* would stop the creationist movement cold! Why haven't they thought of that? Undoubtedly, they have, and their inability has only added to their frustration and fury.

63 Ibid., p. 6.

Games People Play

One leading evolutionary scientist has recently made a most revealing admission. Richard Dickerson, an authority in the esoteric field of chemical evolution, said this:

Science, fundamentally, is a game. It is a game with one overriding and defining rule. Rule No. 1: Let us see how far and to what extent we can explain the behavior of the physical and material universe in terms of purely physical and material causes, without invoking the supernatural.⁶⁴

Therefore, science (or at least evolutionary “science”) is not necessarily a search for truth, as we used to be told, but a game in which scientists try to find naturalistic causes for all things, including even the origin of the universe and everything in it.

I still remember the remarkable statement of a professor in the audience at the conclusion of a creation/evolution debate in which I participated a number of years ago. He said, in effect: “You may well be right; special creation is probably the truth and evolution is wrong. Nevertheless, evolution is science, and creation is religion, so only evolution should be taught in schools.” Not every evolutionist is as frank as this, but this really *is* the game they play!

A second rule seems to be that the end justifies the means. In Stephen Jay Gould’s book *The Mismeasure of Man*, that noted evolutionary author argues that the sociopolitical bias of an author (Gould himself has admitted being a Marxist) could well have an effect on his scientific results. Commenting on this, another admitted evolutionary Marxist at Harvard, Dr. Richard Lewontin, has (no doubt subconsciously) suggested this second rule of the evolutionists’ game plan:

Scientists, like others, sometimes tell deliberate lies, because they believe that small lies can serve big truths.⁶⁵

Even though scientists never cite any real scientific evidence for evolution, doctrinaire evolutionists insist that there *is* such evidence, because any alternative is outlawed by the rules of the game they are playing.

⁶⁴ Richard E. Dickerson, “The Game of Science,” *Perspectives on Science and Faith*, vol. 44 (June 1992), p. 137.

⁶⁵ Richard C. Lewontin, “The Inferiority Complex,” *New York Review of Books* (October 22, 1981).

In other words, it's natural selection or a Creator. This is why prominent Darwinists like G. G. Simpson and Stephen Jay Gould, who are not secretive about their hostility to religion, cling so vehemently to natural selection. To do otherwise would be to admit the probability that there is design in nature — and hence a Designer.⁶⁶

A third rule of this game of evolutionary science seems to be to insist that all scientists, by definition, are evolutionists. Even though there are today thousands of creationists with post-graduate degrees in science, who are pursuing professional careers in science, they are commonly ignored or ridiculed or even denied status as scientists at all, by the evolutionary establishment. The ploy is that, no matter what scientific credentials they might have, scientists cannot become creationists without forfeiting their status *as* scientists.

In fact, many think that it would be better not ever to let creationists become scientists at all! Many years ago, when one of us was an engineering department chairman at Virginia Tech, he asked the biology professor there in charge of the doctoral program in that department whether a creationist student could get a Ph.D. degree in his department. The answer was — flat out — “No!” No matter how outstanding his grades or his dissertation or even his knowledge of evolutionary theory might be, if he did not *believe* in evolution, he could not get the degree. That's the rule of the game!

This commitment to the rules has been expressed most starkly by two liberal Iowa professors:

As a matter-of-fact, creationism should be discriminated against. . . . No advocate of such propaganda should be trusted to teach science classes or administer science programs anywhere or under any circumstances. Moreover, if any are now doing so, they should be dismissed.⁶⁷

That “liberal” opinion was written by an Iowa State University engineering professor, and published by the main national organization dedicated to fighting creationism wherever it surfaces — an organization whose establishment was funded by the Carnegie Foundation. An even more “liberal” sentiment was expressed by another Iowa professor, who

66 George S. Johnston, “The Genesis Controversy,” *Crisis* (May 1989), p. 17.

67 John Patterson, “Do Scientists and Educators Discriminate Unfairly Against Creationists?” *Journal of the National Center for Science Education* (Fall 1984), p. 19.

said that any professor should have the right to “fail any student in his class, no matter what the grade record indicates”⁶⁸ if that professor discovers that the student is a creationist. Furthermore, the student’s department should have the right of “retracting grades and possibly even degrees”⁶⁹ if the student becomes a creationist later.

Two modern California cases illustrate how the game is currently played. In Vista, California, the school board, after an election, for the first time (1993) had a majority of Bible-believing Christians on the board. However, since this community had been selected for aggressive and innovative new programs for teaching evolution, much was at stake. Therefore, the evolutionists in the community proceeded to promote a recall election because of their groundless fear that the “fundamentalist-dominated” board might try to introduce creationism into science classes in their schools. The board had never moved to do any such thing, but, when evolutionists demanded the issue be brought to an immediate head, it had simply proposed that a non-evolutionary supplementary text, *Of Pandas and People*, be approved for reference use in biology classes. This book does not mention creation nor God and does not oppose evolution *per se*, but does argue that the intricate complexity of living creatures implies some kind of “intelligent design.” The furor of the evolutionary contingent in the community, at even the *hint* that God somehow might have been involved in origins, was amazing to see!

Soon after that, a similar teapot-tempest blew in at San Francisco State University, where Dean Kenyon, one of the co-authors of the book *Of Pandas and People*, was a tenured professor. Dr. Kenyon had been teaching the standard course in evolution there for many years, and was a recognized authority on evolution, even having authored a widely used textbook arguing for the naturalistic origin of life. A number of years ago, however, he had become a creationist, partially through reading creationist books. When he came with his new book advocating “intelligent design,” and especially after this book received such notoriety in Vista, his department chairman, supported evidently by the rest of the department, censured him and took his course away from him.

It was encouraging and surprising in this case, however, that the faculty senate at San Francisco State and even the American Association of University Professors partially supported Dr. Kenyon in this situation, contending that he was denied due process. Maybe there is still some

68 Kendrick Frazier, “Competence and Controversy,” *Skeptical Inquirer*, vol. 8 (Fall 1983), p. 2–5.

69 Ibid.

slight hope that the rules of the game can be changed enough to incorporate academic freedom for creationist students and faculty in public institutions.

But don't count on it. Dr. Eugenie Scott, director of the National Center for Science Education, has made it clear that the evolutionary establishment not only opposes the teaching of biblical creationism in public schools and colleges, but also opposes "scientific creationism," "intelligent design," "abrupt appearance," or any other system that would dilute naturalistic evolution. They oppose allowing any arguments or evidence that might throw any doubt whatsoever on evolution. The name of the game is evolution, and *only* evolution, with no hint permitted of anything else.

Furthermore, evolutionism is not limited to science courses. The schools and their evolutionary leaders are engaged in a deadly game with very broad goals, and these social goals are all based on evolution.

The rules of this evolutionary game definitely do not include fair play for creationists, or for Christians in general. If the reigning naturalists continue to win, the prize will eventually be a world government controlled by a political, economic, and educational system grounded and built on evolutionary humanism.

Just before he died, the famous Christian scholar C.S. Lewis, who had long supported the idea of theistic evolution, changed his mind, and declared the following:

I wish I were younger. What inclines me now to think you may be right in regarding [evolution] as the central and radical lie in the whole web of falsehood that now governs our lives is not so much your arguments against it as the fanatical and twisted attitudes of its defenders.⁷⁰

This is, indeed, a lethal game that some people are playing! And they are playing it in deadly earnest for their team coach, the father of lies (see John 8:44).

70 C.S. Lewis, private letter (1951) to Captain Bernard Acworth, one of the founders of the Evolution Protest Movement (England). Cited by Dr. Ronald Numbers in his book, *The Creationists* (Adolph Knoff Co., 1991), p. 153.

Chapter 6

Evolution and Compromising Christians

Although nothing is impossible with God, it would seem that our nation's public schools and secular universities are so completely dominated by evolutionary humanism and its evil fruit that they are almost beyond hope of reclamation, humanly speaking. This, of course, is the primary reason for the explosive growth of the Christian school movement and, more recently, the home school movement in this country in recent years.

This growth has been in spite of many legal challenges attempting to thwart it. So far, however, the courts have largely upheld the rights of Christian parents and teachers to establish such schools and to teach their curricula in a biblical and creationist framework.

One notable victory was in the federal lawsuit of the Institute for Creation Research Graduate School against California's State Department of Public Instruction, which had tried vigorously to shut it down for teaching its science graduate degree programs in a framework of scientific biblical creationism. The educational establishment, under Superintendent Bill Honig, had maintained that it was illegal to teach science, even in a private Christian school, unless it was done in terms of evolution. In 1992 however, the federal district judge in San Diego issued a declaratory judgment to the effect that ICR and all other private Christian schools were free to teach *any* subject in any context they might choose. So far, at least to our knowledge, this ruling has not been challenged.

Furthermore, despite much opposition, also in 1992, the secretary of education, Lamar Alexander, approved (on appeal) the recognition of the

Transnational Association of Christian Colleges and Schools as an approved accreditation agency for creationist institutions of post-secondary education. As of 1995 TRACS has recognized at some level of membership over 60 such colleges and seminaries, including ICR's Graduate School.

Sadly, however, the creation movement today is beginning to receive almost as much opposition from compromising Christian individuals and organizations (churches, schools, publications, etc.) as from the evolutionary humanists. "Christian" compromise is nothing new, of course — especially on this issue — but it does seem to be gaining new momentum in recent years, just as creationism, ironically, is meeting with significant success in the *public* arena.

Theological Confusion

It is inexcusable for evolutionary scientists to accept evolution as a scientific fact, when all the *facts* of science conflict with evolution and support creation, but at least we can understand the humanist desire to find a naturalistic origin for everything. Evolutionists feel it to be the peculiar mission of science to explain all physical reality without God. Though we as Christian creationist scientists disagree with this idea, we can comprehend it.

But what can we say about those *theologians* who are evolutionists? Why should those whose specialty is "the study of God" (for that is what "theology" means) attempt to explain things *without God* (for that is what evolution purports to do)? Is this strange behavior occasioned because "they loved the praise of men more than the praise of God" (John 12:43)?

Such theologians apparently suppose that evolution may be God's method of creation, but this is a serious charge to bring against God! Evolution is the most wasteful, inefficient, cruel way that one could conceive by which to create man. If evolution *is* true, we certainly should not blame God for it!

The famous scientist-philosopher Bertrand Russell had some incisive comments to make about such evolutionist theologians in his well-known atheistic book *Religion and Science*:

Religion, in our day, has accommodated itself to the doctrine of evolution, and has derived new arguments from it. We are told that "through the ages one increasing purpose runs," and that evolution is the unfolding of an idea which has been in the mind of God throughout. It appears that during those ages which so troubled Hugh Miller, when animals were

torturing each other with ferocious horns and agonizing stings, Omnipotence was quietly waiting for the ultimate emergence of man, with his still more widely diffused cruelty. Why the Creator should have preferred to reach his goal by a process, instead of going straight to it, these modern theologians do not tell us. Nor do they say much to allay our doubts as to the gloriousness of the consummation.¹

But can't we be *Christian* evolutionists, they say. Yes, no doubt it is possible to be a Christian *and* an evolutionist. Likewise, one can be a Christian thief, or a Christian adulterer, or a Christian liar! Christians can be inconsistent and illogical about many things, but that doesn't make them right.

We are thankful for the great numbers of godly theologians who are true to the Scriptures, as well as to the real facts of science, and who, therefore, are strong creationists. We are concerned and sad for those out-of-character theologues who are not.

One of the most significant aspects of the modern revival of creationism is that it was spearheaded by scientists rather than theologians. As a matter of fact, it is usually easier to convert a scientist to belief in creation, than it is to win a "liberal" theologian or philosopher. The latter are more committed to evolution than even evolutionary scientists! Scientists normally deal in facts, whereas liberal religionists, not being experienced in the factual approach to science, and having long since rejected the factuality of the Bible, are completely adrift on a sea of metaphysical speculation.

Such liberal theologues (as well as their compromising conservative colleagues) suppose that evolution is God's "method of creation," ignoring the fact that this would make God out to be a monster. Evolution is certainly the most brutal and inefficient process conceivable by which to accomplish "creation." Most leading evolutionary scientists see this clearly, and consider such theologians to be misguided at best.

The proponents of teleological theories, for all their efforts, have been unable to find any mechanism (except supernatural ones) that can account for their postulated finalism. . . . The frequency of extinction in every geological period is another powerful argument against any finalistic trend toward perfection.²

1 Bertrand Russell, *Religion and Science* (London: Oxford University Press, 1961), p. 73.

2 Ernst Mayr, "Evolution," *Scientific American*, vol. 239 (September 1978), p. 50.

Judged by scientists and others, much philosophy of science has been downright irrelevant, at best a series of brilliant axiomatic games, more often pretentious nonsense.³

So why would a professing believer be enamored with such games and nonsense as these?

Charles Darwin himself, once at least a nominal believer in God (the only degree he ever got was as a divinity student), was forced by the very nature of evolutionary theory to realize that it was inconsistent with the concept of a wise and loving God. He stressed that, instead of man's bringing death into the world as the Bible teaches (Rom. 5:12), death brought man into the world. We note again that in the very last paragraph of his *Origin of Species*, he wrote this declaration:

Thus, from the war of nature, from famine and death, the most exalted object which we are capable of conceiving, namely, the production of the higher animals, directly follows.⁴

A brilliant young biologist of the present generation, in her book *The Center of Life*, notes the heartless and mindless character of evolution:

Evolution is a hard, inescapable mistress. There is just no room for compassion or good sportsmanship. Too many organisms are born, so, quite simply, a lot of them are going to have to die, because there isn't enough food and space to go around. You can be beautiful, fat, strong, but it might not matter. The only thing that does matter is whether you leave more children carrying your genes than the next person leaves. It's true whether you're a prince, a frog, or an American elm. Evolution is a future phenomenon. Are your genes going to be in the next generation? That is all that counts.⁵

This is the system that our illogical theologians would seek to harmonize with Christianity! The essence of Darwinism is the survival of the fittest (or the most prolific) in a life-and-death struggle for existence,

3 June Goodfield, "Humanity in Science," *Phi Beta Kappa Key Reporter* (Summer 1977), p. 4.

4 Charles Darwin, *Origin of Species*. All editions, final paragraph.

5 Lorraine Lee Larison Cudmore, excerpts as quoted in *Science Digest*, vol. 82 (November 1977), p. 46.

with extermination of the weak and unfit. The Lord Jesus Christ, on the other hand, stressed that love and self-sacrifice, with special concern for the weak and helpless, must characterize true Christianity.

Evolutionism is compatible with communism, with fascism, with anarchism, imperialism, and all other systems based on struggle and hatred, but not with Christianity. It is a necessary component of atheism and materialism, but a very unnatural adjunct to theism.

Marx admired [Darwin's] book not for economic reasons but for the more fundamental one that Darwin's universe was purely materialistic, and the explication of it no longer involved any reference to unobservable, non-material causes outside or "beyond" it. In that important respect, Darwin and Marx were truly comrades.⁶

It is bad enough for theological "liberals" to embrace evolutionism, but absolutely inexcusable for those who profess to believe the Bible and to follow Christ. Yet there have been many Christian leaders ever since Darwin who have led multitudes down this path of compromise and eventual apostasy, and the same cycle is repeating itself in much of so-called evangelicalism today.

The so-called "main line" churches and religious schools have long since capitulated to evolutionism and the religious liberalism that inevitably follows.

The modern creationist revival has caused great distress to this influential group. Ever since Darwin, a significant number of Christian clergymen and Christian intellectuals have felt it essential to be in line with "modern" thought and have, therefore, tried to accommodate evolution in their theology. Many of the greatest preachers of the 19th century — such as Henry Drummond in England and Henry Ward Beecher in America — soon were leading large numbers of their followers into theistic evolution, and it wasn't long before practically all the seminaries and colleges of the mainline denominations had capitulated to what they considered to be modern science.

Most people have the impression that the religionists of Darwin's day opposed evolutionism, while the scientists promoted it, with the resulting conflict being a classic example of religious bigotry opposing science, but it was really the other way around. The original and most vigorous opposition to Darwin came from scientists, whereas many religious

⁶ Tom Bethell, "Burning Darwin to Save Marx," *Harper's* (December 1978), p. 37.

leaders were ready to accommodate “evolution” right from the start. Francis Glasson says:

Darwin expected that his book would arouse violent criticism from the scientific world, and it certainly came from that quarter. According to his own account, most of the leading scientists of the day believed in the immutability of species. . . . On the other hand, many Christian leaders took a very different line, even from the early stages . . . Owen Chadwick, Regius Professor of Modern History at Cambridge, wrote after extensive research: “At first much of the opposition to Darwin’s theory came from scientists on grounds of evidence, not from theologians on grounds of Scripture.”⁷

The same has been true ever since, and is certainly true today. Almost all college and seminary faculty members of the large denominations teach theistic evolution.

Evangelical Compromise

The evolutionary philosophy thoroughly dominates the curricula and faculties of secular colleges and universities today, as well as the schools of the large religious denominations. It is not so well known, however, that this philosophy has also had considerable effect on many evangelical Christian colleges. When this fact is pointed out, the reaction of many Christians is one of surprise or even doubt. “How could . . . College, so well known for academic leadership in the Christian world, *possibly* be teaching evolution, especially when its faculty members all assent to a statement of faith? Surely there must be some mistake!”

There is no mistake, however. Although there are still many Christian schools whose faculties are strongly biblical and strictly creationist, many of the most highly respected schools have compromised with evolutionism to an alarming degree. An article entitled “Creationism and Evolutionism as Viewed in Consortium Colleges”⁸ documented this fact quite thoroughly more than 20 years ago. Written by Dr. Albert J. Smith, a biology teacher at Wheaton College, this paper gives the views of 38 teachers in science and math from the Christian College Consortium, a group of about 10 or 12 of the leading Christian colleges, including such

7 Francis Glasson, “Darwin and the Church,” *New Scientist*, vol. 99 (September 1, 1983), p. 638–639.

8 J. Albert Smith, “Creationism and Evolutionism as Viewed in Consortium Colleges,” *Universitas*, vol. 2, no. 1 (March 1974).

schools as Wheaton College, Gordon College, Westmont College, Messiah College, Malone College, Taylor University, Seattle Pacific College, Greenville College, Bethel College, and Eastern Mennonite College.

Dr. Smith pointed out that, in the opinion of their own science faculties, these institutions have *no well-defined position* on creation or evolution. Nevertheless, these people also say that their institutions must “maintain a conservative stance for promotional purposes.” Interesting! Financial supporters of Christian schools are usually strong creationists.

As far as the faculty members themselves were concerned, Dr. Smith says:

Efforts to characterize and identify with the departmental positions results in all respondents calling themselves “theistic evolutionists,” “progressive creationists,” or infrequently “fiat creationists.”⁹

It is good to know that there are still a few “fiat creationists” in the consortium, but it is evident that they constitute a small minority. “Progressive creationism,” of course, is a semantic variant of “theistic evolutionism,” both systems adopting the geologic-age framework that is essentially synonymous with naturalistic uniformitarianism, and rejecting the straightforward biblical teaching of a completed recent creation and worldwide Flood.

None of the colleges in the consortium openly teach evolutionism in the manner of secular colleges, of course. Some teachers do try to present both creation and evolution, and the evidences for and against each, to their students. The predominant attitude, however, is apparently that the question of origins is unimportant and irrelevant!

Relatively few colleges emphasize the creationist-evolutionist dialogue at all. . . . The students are encouraged to make up their own minds regarding personal position.¹⁰

Quotations given in the article from the individual responses of faculty members show that many of them use the standard clichés in trying to avoid this question: “. . . creationism (a biblical statement) and evolutionism (a scientific statement) are not considered to be antagonistic but rather at different levels; creationism considers the *who* and the *why*, whereas evolution considers the *how*, the *when*, and the *how much*”; “. . . the important thing is not *how* but *Who*.”

9 Ibid.

10 Ibid.

The reason that true creationists object to such views, of course, is because the Bible *does* say how, when, and how much, *as well as* who and why! Furthermore, as the scientists of the Creation Research Society and the Institute for Creation Research have shown, the true facts of science do correlate much better with these biblical statements on creation than with evolution. Such facts, however, seem always to be ignored by “Christian evolutionists” and “progressive creationists.”

Saying that the evolution/creation question is “not a significant problem,” “not basic to the Christian faith,” “unimportant,” “a dead issue,” and the like (all these judgments are quoted from respondents of the consortium) is most likely merely a devious way of saying: “Well, acceptance in the academic world requires me to believe in evolution, and I don’t want to face up to the biblical and scientific reasons for rejecting evolution, so I would prefer to bypass the problem.”

On one occasion several years ago, one of the writers (H. Morris) spent several hours discussing this problem with a professor of geology at one of the consortium colleges. This teacher insisted that Christians *must* accept the geological-age system as taught by evolutionary geologists. When asked how he, as a professedly Bible-believing Christian, reconciled the Genesis record of creation and the Flood with this system, his reply was that he didn’t know of any way in which they *could* be reconciled (he agreed that neither the gap theory nor the day-age theory was acceptable). When also asked how he reconciled Jesus Christ’s acceptance of the literal Genesis record of creation and the Flood with the geological ages, he replied that he didn’t know how to reconcile that either. His final conclusion was that all of this was unimportant. Only one thing apparently *was* important; namely, to accept the geological ages (and to be acceptable to his secular peers)!

More recently, this writer had two opportunities to talk at some length with the head of the geology department at this college on the same subject. He took much the identical position, also adding that we would never be able to understand the meaning of the Genesis record of creation and the Flood until we get to heaven! It is not important for us to understand it now, he felt.

One must confess a certain lack of patience with this type of logic. How can a Christian say the doctrine of special creation is unimportant when it is foundational to every other doctrine in Scripture? How can one say the evolutionary philosophy is not significant, when it has been made the basis of Fascism, Communism, animalism, racism, modernism, atheism, and practically every other harmful philosophy known to man? How can *Christian* college professors teach their students that

evolution is an optional question when the Scriptures plainly teach otherwise?

“How long halt ye between two opinions? If the Lord be God, follow him: but if Baal, then follow him” (1 Kings 18:21).

Although evolutionism has most affected Christian higher education, this philosophy has also influenced numerous Christian elementary and secondary schools. Many leading Christian periodicals have, likewise, been significantly infiltrated by evolutionary thinking. A number of churches, missions, and other Christian institutions have been similarly affected.

One of the most frustrating problems encountered in trying to encourage and strengthen belief in a Creator and in creationism is the indifference of so many professing Christian people to the urgent importance of this issue. “I don’t believe in evolution anyhow, so why should I waste time in studying or promoting creationism?” “Why get involved in peripheral and controversial issues like that — just preach the gospel!” “The Bible is not a textbook of science, but of how to live.” “It is the Rock of Ages which is important — not the age of rocks!” “Winning souls is the principal thing — not the winning of debates.”

Platitudes such as the above, however spiritual they sound, are really cop-outs. They tend to become excuses for avoiding serious thought and the offense of the cross. In the name of evangelism and of appealing to large numbers, a least-common-denominator emphasis on emotional experiences and a nominal commitment of some kind has become the dominant characteristic of most Christian teaching and activity today, and this is almost as true in fundamentalist and conservative circles as it is among religious liberals.

This ostrich-like attitude seems to date largely from the aftereffect of the infamous Scopes Trial in 1925. The fundamentalists and creationists were made to look so ridiculous by the news media covering that trial at the time (and they still are exploiting it today!) that Christians in general retreated altogether from the battle for the schools and for the minds of the young people. Avoiding any further attempt to relate science and history to an inspired and inerrant Bible, Christian teachers and preachers thenceforth emphasized evangelism and the spiritual life almost exclusively. The “gap theory,” which supposedly allowed the earth’s billions of years of evolutionary history to be pigeonholed between the first two verses of Genesis and then ignored, provided a convenient device for saying that the entire question was irrelevant.

As a consequence, in less than a generation the entire public school system and the very establishment itself — educational, scientific, political, military, industrial, and religious — was taken over by the evolutionary philosophy and its fruits of naturalism, humanism, socialism, and animalistic amorality.

For the past several decades, of course, a noteworthy revival of creationism has been taking place, both in the churches and, to some extent, in the schools. Thousands of scientists have become creationists, and the interest among teachers and students in creationism is higher than it has ever been.

Nevertheless, although many churches and Christian people have become actively involved in the creation issue, it is still sadly true that the majority of them are indifferent, or even antagonistic, to creationism. They think that it is only a peripheral biological question, of no concern in the preaching of the gospel. Even most fundamentalists, who themselves believe in creation, think that evolution is a dead issue.

Such an attitude is based on wishful thinking, to say the least. The lead article some years ago in *Science*, the official journal of the prestigious American Association for the Advancement of Science, said the following:

While many details remain unknown, the grand design of biologic structure and function in plants and animals, including men, admits to no other explanation than that of evolution. Man, therefore is another link in a chain which unites all life on this planet.¹¹

Not only did man evolve, but so did “the religions of Jesus and Buddha.”¹² That being so, not only are the supernatural aspects of Christianity open to question, but so are its ethical teachings.

An ethical system that bases its premises on absolute pronouncements will not usually be acceptable to those who view human nature by evolutionary criteria.¹³

Ethics and morals must evolve as well as organisms! And so must social and political systems. There are no absolutes!

This is the logical and inevitable outgrowth of evolutionary teaching. But it is also the logical and inevitable outgrowth of Christian indifference to evolutionary teaching.

11 A. G. Motulsky: “Brave New World,” *Science*, vol. 185 (August 23, 1974), p. 653.

12 Ibid.

13 Ibid., p. 654.

The doctrine of special creation is the foundation of all other Christian doctrine. The experience of belief in Christ as Creator is the basis of all other Christian experience. Creationism is not peripheral or optional; it is central and vital! That is why God placed the account of creation at the beginning of the Bible, and why the very first verse of the Bible speaks of the creation of the physical universe.

Jesus Christ was Creator (Col. 1:16) before He became Redeemer (Col. 1:20). He is the very “beginning of the creation of God” (Rev. 3:14). How then can it be possible to really know Him as Savior unless one also, and first, knows the triune God as Creator?

The very structure of man’s time commemorates over and over again, week by week, the completed creation of all things in six days. The preaching of the gospel necessarily includes the preaching of creation: “The everlasting gospel to preach unto them that dwell on the earth . . . worship him that made heaven, and earth, and the sea, and the fountains of waters” (Rev. 14:6–7).

If man is a product of evolution, he is not a fallen creature in need of a Savior, but a rising creature, capable of saving himself.

The ethical human brain is the highest accomplishment of biologic evolution.¹⁴

The gospel of evolution is the enemy of the gospel of Christ. The gospel of Christ leads to salvation, righteousness, joy, peace, and meaning in life. Evolution’s gospel yields materialism, collectivism, anarchism, atheism, and despair in death.

Evolutionary thinking dominates our schools today — our news media, our entertainment, our politics, our entire lives. But evolution is false and absurd scientifically! How long will Christian people and churches remain ignorant and apathetic concerning it?

Christians who have been indifferent to the menace of evolution should consider the following analysis by Dr. William Provine, who is both professor of history and professor of biological sciences at Cornell University.

As Jacques Monod, E. O. Wilson, and many other biologists have pointed out, modern evolutionary biology has shattered the hope that some kind of designing or purposive force guided human evolution and established the basis of

¹⁴ Ibid, p. 662.

moral rules. Instead, biology leads to a wholly mechanistic view of life. . . . There are no gods and no designing forces. The frequently made assertion that modern biology and assumptions of the Judeo-Christian tradition are fully compatible is false. Second, there exist no inherent moral or ethical laws, no absolute guiding principles for human society.¹⁵

If Provine and all his humanistic colleagues are right (that is, if evolution is true), then Christianity (or any other theistic religion) is redundant, or even harmful.

Religion is like the human appendix: although it was functional in our distant ancestors, it is of no use today. Just as the appendix today is a focus of physical disease, so too religion today is a focus of social disease. Although religion was a force accelerating human evolution during the Ice Age, it is now an atavism of negative value.¹⁶

The above opinion is that of the former chairman of the division of science and technology at one of the colleges of the State University of New York (and himself a former "Christian"). In any case, his conclusion is quite sound if his premise is valid. That is, if evolution is true, then the Christian religion is false and, for the good of further evolutionary progress, the sooner it can be forgotten, the better.

But we can be thankful that evolution is *not* true! As shown in Volume II of this trilogy, the real facts of science support creation. The entire premise and framework of evolutionism is altogether false and its impact in human life and thought has been devastatingly harmful! Evangelical Christians urgently need to become informed and concerned and active in the battle to rebuild biblical creationism as the foundation of all truth and life, and no such compromise as progressive creationism can do this.

Current Evangelicalism

For a thorough refutation of all these compromise theories (gap theory, day-age theory, local flood theory, etc.), the reader is referred to Volume 1 of this Trilogy. Many earlier books, by these writers and others, published especially in the last 30 years, have documented this biblical

15 William Provine, "Influence of Darwin's Ideas on the Study of Evolution," *Bioscience*, vol. 32 (June 1982), p. 506.

16 Frank R. Zindler, "Religion, Hypnosis and Music: An Evolutionary Perspective," *American Atheist*, vol. 26 (October 1984), p. 24.

evidence over and over again.¹⁷ The biblical record, as clearly and unequivocally as could possibly be expressed in human language, teaches that all things were created supernaturally by God in six literal days several thousand years ago, and the same is true of the cataclysmic global Flood in the days of Noah. Like it or not, that *is* what God has said in His Word!

However, the old cycle of compromise is again repeating itself. In reaction against the revival of scientific, literal biblical creationism that has been convincing millions around the world in recent decades, including thousands of fully qualified scientists, a number of evangelical scientists have been vigorously attacking those of us whom they call “young-earth creationists.” Insisting that Christians must accept the supposed scientific evidence of the “big bang” origin of the universe around 15 billion years ago, as well as the 4.5 billion years of “geological ages” of earth history, in order to be approved by the scientific community, they want to be recognized as “progressive creationists” by the Christian community.

A number of books have been published in recent years by such men, often sarcastically disparaging the scientific sophistication of young-earth creationists, and then trying to reinterpret the Scriptures to accommodate their “old-earth creationism.” The most influential of these writers has been Dr. Hugh Ross, who has a Ph.D. in astronomy (University of Toronto) and heads an organization called “Reasons to Believe.” Apart from a post-doctoral stint at the California Institute of Technology, Ross has apparently contributed little to the science of astronomy itself. Nevertheless, he frequently insists that all Christians should accept his astronomical expertise in assuring us that the “big bang” represents — is equivalent to — the divine creation of the universe as stated in Genesis 1:1.

The great majority of leading astronomers, of course, disagree emphatically with this. Many reject the big-bang hypothesis altogether — men such as Sir Fred Hoyle, Hannes Alfvén, Geoffrey Burbidge, Halton Arp, Eric Lerner, and many others. Those who do accept it (and they currently represent the majority), with few exceptions consider the big bang as a purely naturalistic occurrence, as a quantum fluctuation from primeval nothingness, or something of the sort.

Nevertheless, evangelicals seem to be falling all over themselves in scrambling onto the Hugh Ross bandwagon today. His teachings have been promoted not only by numerous leading churches and Christian

¹⁷ See especially Henry M. Morris’s *Biblical Creationism* (Grand Rapids, MI: Baker Book House, 1993), in which every passage in the Bible dealing with creation, the Flood, or related issues is examined.

colleges, but also by the Navigators, Campus Crusade for Christ, Inter-Varsity Christian Fellowship, the Gideons International,¹⁸ Ligonier Ministries, Focus on the Family, Trinity Broadcast Network, and many others.

Dr. Ross's imposition of Scripture on the sciences of astronomy and cosmology is accepted by few if any leading scholars in these fields. But it is his distortions of Scripture that are of greater concern to us "young earth creationists," upon whom he looks with such patronizing disdain.

In order to accept the standard big-bang system of stellar and cosmic evolution, Dr. Ross then must accept the geological ages with their billions of years of suffering and death in the animal kingdom. This, of course, requires him also to accept the local flood theory and pre-Adamic man-like creatures, who looked and acted like human beings but had no eternal souls.

All of this obviously requires such distortion of Scripture as to amount in effect to a rejection of its inerrancy and clarity. Hugh Ross still insists that he is a "creationist," and he does hold to the traditional doctrines of evangelical Christianity (the deity of Christ, substitutionary atonement, etc.). He is actively evangelistic, an attribute which no doubt contributes to his wide acceptance and promotion by evangelicals.¹⁹ The fact remains, however, that his system of biblical interpretation is grievously in error,²⁰ and is leading many unwary Christians down the same wide path to liberal unbelief that has been followed by multitudes of professing Christians in previous generations.

Dr. Ross is not by any means the only "progressive creationist" opposing literal biblical creationism, of course. Other influential books

18 Dr. Ross was featured speaker at a recent International Convention of the Gideons, and his message was then featured in the monthly *Gideon* magazine. When one of us (H. Morris) objected and offered to submit a paper, defending recent creation as a matter of balance, he was refused. He had been a member of the Gideons since 1942, was formerly a state president of the Gideons, and had prepared many of the "Helps" in the Gideon Bibles, so this rejection was hard to understand. We hope that this decision to follow the Ross compromise doesn't presage a drift of the Gideons away from their love for God's Word.

19 We have been rebuked by Rossites for an "unloving" attitude toward a Christian brother. The fact is, however, that Dr. Ross has devoted far more space in his writings and time in his lectures to denigrating young-earth creationists in general, and us in particular.

20 A number of articles have discussed this fact in detail. See especially the book *Creation and Time*, by Paul Taylor and Mark Van Bebber (Films for Christ, 1994). The entire book is devoted to an exposition of Ross's faulty interpretations and misapplications of Scripture and early Christian writers.

in this vein have been written by Dr. Davis Young, Dr. Pattle P.T. Pun, Dr. Robert Gange, Dr. Robert Newman, Alan Hayward, Don Stoner, and others. Still others, more in the frank genre of theistic evolution, have come from Howard Van Till, Richard Bube, and others. Most of the scientists in the American Scientific Affiliation and in England's Victoria Institute are either theistic evolutionists or progressive creationists, as are the science faculties at Wheaton College, Gordon-Conwell College, Westmont College, Point Loma College, and many other leading evangelical colleges.

In the early days of this country, the schools and colleges were committed to Scripture and the Christian gospel, including true creationism. But great institutions such as Harvard, Yale, Brown, and others soon capitulated to unitarianism and then to evolutionism, finally becoming bastions of atheism, Marxism and (more recently) New Age pantheism. Later, notable denominational schools (Baylor, Southern Methodist, Princeton, Notre Dame, etc.) went through the same decline, though still maintaining a very tenuous commitment to their respective denominational tenets.

Now we also find evangelical schools, founded mostly in the present century with the purpose of returning to sound biblical doctrinal standards, repeating the same old compromising cycle. Even the charismatic and "fundamentalist" schools have been affected, many of them advocating the so-called "gap theory," which tries to retain the evolutionary ages of geology and astronomy by inserting them in an imaginary "gap" of billions of years prior to Genesis 1:2. This compromise is even less defensible scientifically than the day-age theory of the progressive creationists.

The tragedy is that all such compromises with evolutionism are utterly unwarranted! There is *no* scientific evidence for evolution in the first place, nor any *real* scientific evidence for the great age of the earth as demanded by evolutionists. All of this is discussed in detail in Volume 2 of this Trilogy.

Furthermore, as shown in *this* book, evolutionism has provided the pseudo-scientific rationale for nearly every deadly philosophy and evil practice known to man! By all that is right and good in this world, and by God's Word, evolution simply *cannot* be true, and Christians ought to oppose and repudiate it in all of its disguises, not compromise with it.

Evolutionism, thus, has impacted society in many, many areas, including religion, even evangelicalism and fundamentalism. The Bible makes it clear that Satan, the father of lies (John 8:44), is the one who has deceived the whole world (Rev. 12:9). By various and devious means, all

through history and in every nation, he has sought to keep men from knowing the true God of creation and redemption, and also to confuse and dissuade and discourage those who do know Him. He has used the deceptive lure of evolution, in one form or another, as a substitute for the Creator, with the ultimate aim of eventually dethroning God and usurping His cosmic kingdom for himself.

He will be defeated, of course, and eventually confined forever in the lake of fire (Rev. 20:10), with all who have chosen and worshipped his substitute “god” over the true God. The great Deceiver has deceived multitudes, to their eternal doom, but he has deceived himself most of all.

Index of Subjects

- abortion, based on evolutionism 62–67, 99–100
- AIDS 75
- animals, proper use of 132–133
- anthropic principle 119
- astronomy and evolution 15–17
- atheism 105–106
- Babel and evolution 49–53
- big-bang theory 17, 193
- biogenetic law 58–59
 - See also:* recapitulation theory
- biology and evolution 14–15
- church-state relationships 167–168
- coal and oil 138–139
- colleges, Christian 186–187
- communism
 - atheistic 105–106
 - evolutionism, based on 106–117
 - Lamarckianism 107
 - Marxism, still popular in U.S. 108–112
 - punctuatedism 107–113, 115
 - repudiation in former USSR 116
- compromise with evolutionism
 - evangelical 186–195
 - theological 182–186
- creation
 - Christianity, foundation of 191
 - debates 163–165, 174
 - laws 168–170
 - model 162, 165, 167
 - scientific evidence 165
 - scientists who believe in creation 12, 40
- debates, creation-evolution 163–165, 174
- dominion mandate 131–134, 137–140
- drug culture, evolutionary background 75–77
- ecology 129–140
 - See also:* dominion mandate; environmental crisis
- education and evolution
 - church-state question 167–168
 - creation laws 168–170
 - evolutionary dominance in public schools 161–167
 - opposition to creation teaching 171–179
 - public opinion polls 176
 - two-model approach 162, 165, 167
- Enuma Elish* 50–51
- environmental crisis
 - antediluvian environment 137–138
 - evolutionism as the cause 134–137
 - fossil fuels 138–139
 - human stewardship 131–134, 137–140
- evolutionism, evil philosophies
 - rationalized by
 - communism 105–117
 - Nazism 85–92
 - New Age philosophies 117–128
 - racism 61–62, 92–104
 - social Darwinism 61–62, 81–85
- evolutionism, history of
 - Babel, origin at 49–53
 - Eastern pantheism 47–49
 - Greek and Roman philosophy 44–47
 - Lamarckianism 41
 - Middle Ages 42–43
 - Milesian school 45–47
 - modern Darwinism 31–33
 - Plato and Aristotle 44–46
 - precursors of Darwin 32, 34–42
 - Satan's primeval lie 53–56
- evolutionism, Influence of
 - anthropology 15
 - biology 14–15
 - cosmology 15–17
 - ecology 129–140
 - education 161–175
 - ethics 22–26, 86
 - exobiology 148–155
 - geology 17–18
 - philosophy 20–21
 - population growth 140–148
 - psychology 18–19, 60–61
 - religion 26–29
 - social sciences 18–22
 - total world view 11–14
- evolutionism, ungodly practices
 - rationalized by
 - abortion 62–67, 99–100
 - drug culture 75–77
 - Freudianism 60–61
 - homosexuality 73–75
 - racism 61–62
 - violence 77–80
- evolutionary gamesmanship 176–179
- exobiology
 - directed panspermia 150–151, 153
 - evolution, desired evidence for 149–150
 - extra-terrestrial life, No evidence for 152–154
 - high costs of research 154–155
 - occultism often involved 148–149
- extra-terrestrial life, *See:* exobiology
- family values, decline of 71–73

- Fascism 85, 87
See also: Nazism
- Freudianism 60–61
- gaia hypothesis 121–122, 124
- geology and evolution 17–18, 59–60
- goddess worship 159–160
- Great Chain of Being 57–59
- Holocaust, Jewish 87–91
- homosexuality 73–75
- human evolution 15, 97
- humanism 70–71
- ICR Graduate School 181
- imperialism 84–85
- infanticide 79
- Japanese militarism 85
- laissez-faire capitalism 81–85
- Lamarckian evolution 107
- legislation, creation 168–170
- man, origin of 15, 97
- models, creation and evolution 162, 165, 167
- Mother Nature 121–122, 125
- Nazism
 anti-Christian 95
 evolutionism, based on 85–92
 Jewish Holocaust 87–91
 master race, belief in 88, 90–92, 94, 101
- New Age movement
 cosmic consciousness 126, 148
 feminism 125, 156–161
 gaia hypothesis 121–125
 Mother Nature 121–125
 order through chaos 120–121, 126
 pantheistic evolutionism, revival of 52, 117–128, 147
 Satanic origin 122–123
 world religion promoted ... 120, 127–128
 See also: ecology; exobiology
- Nimrod 53–55, 127
- Noahic prophecy 95–96
- occultism 148
- pantheism, evolutionary 47–49, 117–128, 147
 See also: New Age movement
- polls, public opinion 170
- population problem
 carrying capacity of earth 140, 143
 growth equations 144–146
 recent creation, evidence of 145–147
- supposed population explosion 141–142
- progressive creationism
 current advocates 193–195
 See also: theistic evolution
- punctuated evolutionism 107–113, 115
- racism
 biblical silence on racism 95–96, 99
 Darwinism, based on 92–96, 99–104
 evolutionists, recent change of heart by 104–105
 master race delusion in Nazi Germany 88, 90–91, 92, 94
 racism of Charles Darwin 97–98
- recapitulation theory, influence of
 abortionism 62–67
 comparative morphology 60
 Freudian psychoanalysis 60–61
 geologic column 59–60
 Great Chain of Being 57–59
 racism 61–62
 repudiated by science 65–67
- religion and evolution 26–29, 181–193
- Satan 53–56, 122–123
- schools, creation in, *See:* education
- sexual revolution, based on evolutionism 67–73
- sin and death 184–185
- social Darwinism
 exploitation of resources 130, 134–139
 imperialism 84–85
 laissez-faire capitalism 81–85
 racism 61–62
- sociobiology 111, 112
- survival of the fittest 82–84, 87, 90–91
- theistic evolutionism
 Christian colleges teaching 186–187
 creation, supposed method of ... 182–186
 death and suffering before sin implied .. 184–185
 main-line churches and schools teaching 185
 progressive creationism a semantic variant 187
 sadistic God implied 182–183
- TRACS 181–182
- two-model approach 162, 165, 167
- witchcraft 159–160

Index of Names

- Abel, Ernest L. 42, 49, 52, 53
 Acworth, Bernard 179
 Agassiz, Louis 65
 Alexander, Lamar 181
 Alfvén, Hannes 193
 Allegro, John M. 23, 121
 American Anthropological Association 173
 American Association for Advancement of Science 164, 173, 174, 190
 American Bible Society 167
 American Civil Liberties Union 169, 171, 172, 173
 American Geological Institute 173
 American Humanist Association 171, 173, 175
 American Institute of Biological Sciences 173
 American Museum of Natural History 66, 100, 103, 173
 American Scientific Affiliation 195
 American Society of Biological Chemists 173
 Anaximander 45
 Anaximenes 45
 Anderson, John L. 16
 Aquinas, Thomas 43
 Aristotle 43, 44, 45
 Arp, Halton 193
 Asimov, Isaac 153, 154, 163, 171, 172
 Asma, Stephen T. 82, 84, 85
 Augustine 43
 Ayala, Francisco 117, 118
 Ball, John 150
 Barken, Elazar 91
 Barlow, Nora 37
 Barnes, Harry Elmer 20
 Barzun, Jacques 33, 34
 Basil the Great 43
 Baylor University 195
 Beard, Charles 21
 Beardsley, Tim 125
 Beck, W. 59
 Beecher, Henry Ward 185
 Berelson, Bernard 141
 Bergman, Jerry 91, 92, 93, 158
 Bergson, Henri 122
 Berkowitz, Norman 20
 Bethel College 187
 Bethell, Tom 185
 Biological Sciences Curriculum Study 173
 Birch, L. C. 134
 Bird, Wendell R. 168
 Blinderman, Charles S. 38
 Blyth, Edward 35
 Boudinot, Elias 167
 Brace, Loring 103, 104
 Brady, Ronald 172
 Brain, Walter R. 23
 Broad, William J. 170, 171
 Broca, Paul 158
 Brown University 195
 Bryan, William Jennings 88
 Bube, Richard 195
 Burbidge, Geoffrey 193
 Burham, John C. 93
 Burke, Barbara 79
 Butler, Joseph 39
 Campus Crusade for Christ 194
 Capra, Fritjof 120, 121
 Carnegie, Andrew 81, 82, 83, 84
 Carnegie, Dale 82
 Carnegie Foundation 177
 Cartmill, Matt 79, 88, 89, 91, 111
 Caster, K. E. 18
 Cavalli-Sforza, L. L. 97
 Cevasco, G. A. 68, 69
 Chadwick, Owen 186
 Chambers, Robert 58
 Chardin, Teilhard de 117
 Christian College Consortium 186
 Coale, Ansley J. 145, 146
 Conklin, Edwin G. 92, 93
 Conner, Cliff 114, 115
 Continental Congress of 1787 167
 Coon, Carlton 98
 Cornford, F. M. 47
 Cracraft, Joel 164, 165, 166
 Craig, Betty Jean 18
 Creation Research Society 168, 188
 Creation Science Research Center 170
 Crick, Francis 150, 151, 152, 153
 Cudmore, Lorraine Lee Larison 184
 Cumming, Kenneth 12
 Cuvier, Georges 65, 103
 D'Orbigny 65
 Darlington, C. D. 15, 35, 36, 37, 38
 Dart, Raymond 78
 Darwin, Charles 12, 18, 25, 31, 32, 33, 34, 35, 36, 37, 38, 39, 41, 42, 58, 60, 61, 67, 68, 79, 81, 82, 84, 88, 90, 92, 94, 96, 97, 98, 103, 106, 107, 110, 114, 115, 129, 144, 148, 156, 157, 158, 159, 184, 185, 186
 Darwin, Emma 156
 Darwin, Erasmus 36
 Davies, Paul 126
 Dawkins, Richard 111, 112
 Democritus 44, 46
 Denton, Michael 117
 Dewey, John 21, 23, 24, 70, 120

Dickerson, Richard E.	14, 176	Harvard University	195
Diderot, Denis	35	Hayward, Alan	195
Dobzhansky, Theodosius	13, 14, 117, 118, 120, 161	Hegel, Georg W.	39, 108
Down, J. L. Haydon	60, 64, 99	Heidel, Alexander	50
Dreyer, J. L. E.	43	Hesiod	47
Drimmey, James J.	67	Hickey, David R.	116
Drummond, Henry	185	Hill, James	82
Dubay, Dennis	163	Himmelfarb, Gertrude	86, 98
Dubos, Rene	19, 22	Himmeler, Heinrich	87
Durant, Will	80	Hislop, Alexander	49, 50
Dwight, Timothy	39	Hitler, Adolf	66, 86, 87, 88, 90, 91, 92, 101, 112
Dyson, Freeman	119	Hoagland, Hudson	19, 20
Eastern Mennonite College	187	Hoffman, P.	101
Edwards, Jonathan	39	Honig, Bill	181
Ehrlich, Paul R.	134	Hooper, Judith	119
Eiseley, Loren C.	32, 35	Hooton, E. A.	92, 103
Eldredge, Niles	34, 59, 108, 109, 135	Horgan, John	152, 153
Emsley, John	153, 154	Horowitz, Norman H.	153
Engels, Frederick	114, 121	Hoyle, Fred	117, 126, 151, 193
Evolution Protest Movement	179	Hrdlička, Ales	92, 103
Faraday, Michael	40	Hsu, Kenneth J.	83
Ferguson, James	101, 102	Huxley, Aldous	76, 77
Fischer, Eugene	89, 90	Huxley, Julian	26, 76, 117, 118, 120, 123
Focus on the Family	194	Huxley, Thomas Henry	24, 38, 41, 92, 98
Franklin, Benjamin	35	Institute for Creation Research	163, 164, 168, 169, 170, 173, 174, 181, 188
Frazier, Kendrick	178	Inter-Varsity Christian Fellowship	194
Freedman, Donald	141	Jacobsen, Thorkild	51
Freud, Sigmund ..	18, 60, 61, 67, 68, 69, 72	Jaki, Stanley L.	123
Gale, George	119	James, William	19
Gange, Robert	195	Jefferson, Thomas	167
Gasman, Daniel	62	Johanson, Carl	110
George, Wilma	156	Johnston, George S.	177
Gideons International	194	Jung, Carl G.	19
Gish, Duane	12, 163	Kammerer, Paul	107
Glasson, Francis	186	Kant, Immanuel	44
Goethe, Johann	58	Keith, Arthur	24, 25, 86, 87, 95
Goleman, Daniel	61	Kelvin, William T.	40
Goodfield, June	184	Kenyon, Dean	178
Goodman, Ellen	62	Kevles, Bettyann	158
Gordon-Conwell College	195	Kirkland, Edward	82
Gordon College	186	Lamarck, Jean-Baptiste de	35, 36, 37, 41, 60
Gore, Al 125		LaPlace, Pierre S.	44
Gould, Stephen J.	60, 61, 63, 64, 65, 99, 100, 101, 102, 104, 108, 109, 110, 111, 112, 115, 135, 136, 158, 159, 163, 176, 177	Lasen, Alvin G.	173
Graham, W.	98	Lathan, R. E.	46
Green Party	129	Laurence, William	34
Greenville College	187	Leary, Timothy	76
Gregory of Nyssa	42	Leibniz, Gottfried William	37
Grindal, Bruce T.	69	Lenin, Vladimir	105
Gurin, Joel	171	Lerner, Eric	193
Haeckel, Ernst	41, 58, 59, 61, 64, 66, 68, 88, 91, 100	Leucippus	44, 46
Haller, John S., Jr.	93, 98	Lewin, Roger	150
Halstead, L. B.	115, 116	Lewis, C. S.	179
		Lewontin, Richard C.	176

Ligonier Ministries	194	Nimrod	51, 53, 54, 55, 122
Lindsey, Arthur Ward	43	Nitecki, Matthew H.	14
Lomax, Alan	20	Notre Dame University	195
Lovelock, James	124, 125	Numbers, Ronald	179
Lovtrup, Soren	117	O'Rourke, J. E.	108
Lucretius	44, 46	Ogilvey, C. S.	16
Lyell, Charles	35, 41	Oparin, Alexander I.	106
Lysenko, T. O.	107	Orgel, Leslie	150, 151, 153
Lyttelton, George	39	Origen	43
Macbeth, Norman	172	Osborn, Henry Fairfield	66, 92, 100, 101, 103, 104
Malone College	187	Paley, Wliliam	39
Malthus, Thomas	35, 82, 144	Pascal, Blaise	40
Mao Tse-tung	106	Patterson, Colin	164
Marcus, Barcun	106	Patterson, John	177
Marx, Karl	39, 41, 67, 68, 69, 94, 105, 106, 107, 108, 112, 114, 116, 121, 185	Pavlov, Ivan P.	107
Maxwell, Joseph Clerk	40	Plato	45, 57
Mayr, Ernst	12, 13, 14, 32, 183	Plochmann, George Kimball	38
McWhirter, David P.	74	Plotinus	57
Mead, Margaret	141, 143	Point Loma College	195
Means, Richard L.	143	Posner, G. L.	90
Meeter, Merle	6	Powicke, F. M.	28
Meengele, Josef	90	Prigogine, Ilya	121
Messiah College	187	Princeton University	195
Mintz, Sidney M.	93	Pritchard, James C.	34
Mitton, Simon	150	Proctor, Robert N.	88, 89, 90, 91
Money, John	73, 74	Provine, William	13, 14, 15, 191, 192
Monod, Jacques	191	Ptolemy	43
Moore, John A.	174, 175	Pun, Partle P. T.	195
Morris, Henry M.	29, 40, 48, 55, 166, 188, 192	Rachels, James	78, 83, 84
Moses	48	Raup, David M.	59
Motulsky, Arno G.	22, 190, 191	Rehnquist, William	169
Muller, H. J.	21, 23	Reilly, Robert R.	105
Muller, Robert	127	Reinisch, June M.	74
Muller-Hull, Benno	88, 89	Revelle, Roger	142, 143
Munitz, Milton K.	43, 45, 46, 47, 50, 51	Richards, Eveleen	156
Murphy, Kristin	127	Rickard, Lee J.	155
Mussolini, Benito	86, 101	Rifkin, Jeremy	13, 118, 122
Myers, Norman	130	Ritvo, Lucille B.	68
NASA	149, 153	Rockefeller, John D.	82, 83, 84
National Academy of Sciences	173, 174	Roelofsma, Derk Kinnone	159, 160
National Association of Biology Teachers	173	Rogers, Carl	72
National Biology Teachers Association	175	Romanes, George	158
National Cancer Institute	173	Ross, Hugh	193, 194
National Center for Science Education	179	Ruse, Michael	23, 74, 75, 106, 110
National Science Teachers Association	173	Russell, Bertrand	182, 183
Navigators	194	Sagan, Carl	110, 149, 155, 163
Nebuchadnezzar	51	Sanders, Stephanie A.	74
Newman, Robert	195	Scalia, Antonin	169
Newton, Isaac	37, 40	Schaeffer, Francis	87
Nietzsche, Friedrich	33, 39, 86, 88, 98, 105	Schatzman, Martin	68
		Schleunes, Karl A.	92
		Schwabenthan, Sabine	65, 100
		Schwartzman, David	155
		Scott, Eugenie	179
		Seattle Pacific College	187
		Seitz, Frederick	25, 26

Sheldrake, Rupert	122, 124, 125, 126, 148	United Nations Organization	122, 141
Simpson, George G.	36, 59, 94, 95, 96, 177	Unoura, Hiroshi	85
Skinner, B. F.	19, 72	Ussher, James	40
Smit, Jacob	74	Van Bebbber, Mark	194
Smith, Albert J.	186, 187	Van Till, Howard	195
Smith, Mary Ruth	6	Vardiman, Larry	6
Smith, Quentin	16	Veith, Ilza	47, 48
Smith, Wolfgang	127	Victoria Institute	195
Smithsonian Institution	173	Vitz, Paul	68, 69
Sobran, Joseph	62, 64	Vlahos, Olivia	160
Socrates	45	von Engeln, O. D.	18
Southern Methodist University	195	von Verscheur, Otmar	90
Spencer, Herbert	37, 41, 81, 82, 84, 91, 122	Waddington, Conrad	24
Spinoza, Benedictus de	44	Wald, George	119
Stanley, Steven M.	107, 108	Wallace, Alfred	32, 35
Stein, George J.	62, 89, 91, 106	Walters, Wendell W.	69
Stenger, Victor L.	17	Ware, J.	90
Stocking, George W., Jr.	89	Watson, J. B.	19, 72
Stoner, Don	195	Weber, Christian O.	21
Sumner, William Grant	82	Weisskopf, Victor K.	16
Taylor, Paul	194	Wells, William C.	34
Taylor University	187	West, Gilbert	39
Thales	45, 46, 52, 53	Westmont College	187, 195
Thompson, Keith S.	59, 60	Wheaton College	186, 195
Thomsen, Dietrick E.	119	White, Lynn	130, 143
Tipler, F. J.	154	Wick, Gerald L.	150
Toynbee, Arnold	21	Wilson, Edward O.	23, 111, 112, 191
Transnational Association of Christian Colleges and Schools	182	Woodward, John	40
Trinity Broadcast Network	194	Wrangham, R. W.	103, 104
Turner Richard K.	170	Wurmbrand, Richard	116
Turner, John	111, 112, 113	Yale University	195
Tuttle, Russell	103, 104	Yockey, H. P.	152
UNESCO	118, 120	Young, Davis	195
		Young, Robert M.	109
		Zindler, Frank R.	192
		Zirkle, Conway	94

Index of Scripture

GENESIS

1:1	193	2:22–24	75
1:2	56, 195	3:5	56
1:7	138	3:17	137
1:11, 20, 24	138	3:21	132
1:17	139	9:1	142
1:26	131	9:25–27	95
1:26–28	137	10	54
1:27	131, 157	10:5, 20, 31	95
1:27–28	71	10:8–10	51
1:28	131, 142, 143	10:8–12	127
1:29	132	11	54, 123, 147
1:29, 30	137	11:1–9	127
1:31	137, 138	11:4	54
2:1–3	137	11:6, 9	95
2:15	131, 137	18:1, 7–8	132

EXODUS		ROMANS	
20:10	133	1:18–32	27
20:11	123	1:23	54
23:19	133	1:23, 25	127
LEVITICUS		1:24–28	75
20:13	75	1:25	54, 131, 134
25:3–4	133	1:28	54, 78
NUMBERS		3:18	78
22:28	133	5:12	184
DEUTERONOMY		8:20, 22	137
23:17–18	75	8:20–22	139
1 KINGS		1 CORINTHIANS	
18:21	189	8:5	45
JOB		15:33	9
12:7–10	133	2 CORINTHIANS	
38:4–7	137	4:4	55
38:26–27	132	5:18	140
PSALMS		GALATIANS	
2:2, 3	127	3:26	134
19:1	123, 137	3:28	157, 161
19:6	139	EPHESIANS	
24:1	131	1:14	140
102:26	138	5:3–5	72
104:1–5	56	6:4	142
104:10–12, 14, 25, 27–28	132–133	6:12	55
104:24, 31	140	COLOSSIANS	
115:16	151	1:16	191
127:3–5	142	1:20	191
128:1–6	142	1 TIMOTHY	
148	137	3:6	56
148:6	138	4:4	132
ISAIAH		5:18	133
14:12–14	54	6:20	126
40:12	132	HEBREWS	
JEREMIAH		1:3	137
51:7	49	13:4	72
EZEKIEL		JAMES	
28:12–13	55	4:1–2	77
28:17	55, 56	1 PETER	
MATTHEW		3:7	161
7:18–19	73	2 PETER	
10:29	133	1:16	126
11:11	132	REVELATION	
19:3–9	72	3:14	191
MARK		4:11	137
1:6	132	5:13	137
LUKE		7:9	95
1:15	132	11:18	134
6:43	9	12:4	54
22:7–8	132	12:9	55, 122, 195
JOHN		14:6–7	191
12:43	182	17:5	53, 122
8:44	179, 195	17:14	128
ACTS		20:10	196
17:26	92	21:5	140
17:26–27	99	22:3	140
17:28–29	134		